NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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RAYNOLDS & NOURSE, PROPRIETORS. OFFICE....QUINCY HALL. SIMON BROWN, EDITOR. FRED'K HOLBROOK, HENRY F. FRENCH, } ASSOCIATE EDITORS.

THE NEW YEAR.

CHARLES LAMB, in his volume of "*Elia*," says, "Every man hath two birthdays; two days, at least, in every year, which set him upon revolving the lapse of time, as it effects his mortal duration. The birth of a new year is of an interest too wide to be pretermitted by king or cobbler. No one ever regarded the First of January with indifference. It is that from which all date their time, and count upon what is left." It is proper, then, to make it a pausing place, from which to look at events which have passed, as well as to summon before us something of the probable future. Proper, standing on this point and contemplating the portion of our days that has mingled with the untold years which have rolled away behind us, that the heart should be touched, and awakened to new emotions of gratitude. In the sombre December afternoon, with barren fields, and leafless trees around them, how many witness the setting sun, with the mental exclamation, "Shall I behold thee again, descending with the dying year!" or start at the solemn peal of the bell as it rings out the old year. Lamb says he never heard it "without a gathering up of his mind to a concentration of all the images that had been diffused over it for a past twelve-month; all he had done or suffered, performed or neglected—in that regretted time."

But the *lapse of time*, well employed, should be no cause of regret. We hail the corn and fruit harvests with joy; they are no more of special appointment than that we ought to become ripe with good deeds and fruits and be gathered home ourselves. The sum of human duty is to *act well our part*—this done, the lapse of years and the trial of life should fall on the heart as the soft rain on the flinty rock; it makes an impression, to be sure, but so silent and gradual as to be almost imperceptible.

It is no idle uttering of the heart, when we say that we wish all "*A Happy New Year.*" If in the association which has grown up between us, you have enjoyed the reading, as we have the gathering, of these pages, the connection has been a most happy one. You have constantly strengthened us by timely words of encouragement, by the constant communication of your experiences, and theories and deductions from them in your farm operations, and by the most liberal, substantial, and prompt aid in the pecuniary affairs of the establishment. Your writings, many of them fresh from the experiments of the fields, have given these columns their chief value, and they must continue to do so, or they will lose that directness and force which they have already attained by your judicious aid. But with more experience in the great art, with a better knowledge of the wants of the farming community, we shall draw from our own stores and the recorded wisdom of the fathers in the art, with untiring application. Not feeling strictly confined to agricultural books, papers, or discussions for illustrations, we shall feel justified in collecting from the busy walks of commerce, the mechanic shops or laboratory of the chemist, such helps as will elucidate the subjects before us. Waifs from the wayside will be gathered in, whether straying from our own political or religious papers, or wafted across the Atlantic from the experienced farmer in the old countries.

Among the favorable changes which have taken place in the estimation in which farming is held, as an occupation, there is one of much importance, and which is calculated to draw into it many earnest and inquiring minds, and thus soon to produce distinguished men. It is, that *Agriculture now has a literature.* Some of the pleasantest books that have been issued for a few years past have been upon the subject of agriculture and its kindred branches. These works have required more patient research and investigation, and more of the higher powers of the mind to produce them, than almost any other kind of literature. They certainly stand side by side with the best works on astronomy and geology, and as far surpass in merit

and value the millions of volumes of the current literature, as the skilful cultivation of the earth is of more importance than the skilful playing of a game of foot-ball. Without going back to the ancients, who seem to have been well-informed in terra-culture, but as a general thing, knew little of the atmospheric influences upon crops, or of the importance of mineral manures, we will mention a few of the modern writers who have devoted their thoughts to the cultivation of the earth, and added dignity, grace and interest to the pursuit. Sir Humphrey Davy's lectures on agricultural chemistry were commenced before the Board of Agriculture in England as early as 1802, but never published till 1813, and to this day are scarcely known to one in a thousand in this country. Loudon's voluminous works are monuments of learning as well as of usefulness. Johnston's agricultural chemistry, Boussingault's Rural Economy, Stephens's Book of the Farm, and Rogers's Scientific Agriculture, are full of the most useful and practical information.

But there is another, and if possible, still more attractive phase in the literature of agriculture, of which Duncan's Sacred Philosophy of the Seasons, and Hunt's Poetry of Science, are representatives. While the first class enters into the great laws and operations of Nature, showing us how to subdue the wilderness, gain fertile fields, and cover the hills with flocks, the latter analyzes these laws and illustrates the goodness and wisdom of God in the beautiful arrangements of His creation. These show *the Poetry of the great art;* and to a mind untainted by morbid sensibilities, they have an inexpresssible charm. They unravel a thousand mysteries in the grass of the field, or the trees of the forest,—in the drop of water that hangs and trembles on the petal of the flower, or the rugged rock on which it is soon to fall. They show that in agricultural employments there is room for the exercise of all the high and noble faculties of the mind. If the vocation has become one of drudgery, it is because *the mind* is slavish and dull, and not that the subject is not endowed with all the inherent qualities of beauty and grandeur. To the student, this class of literature will possess many pleasant attractions, more than compensate for the unpoetic part of farm work, and draw numbers away from the crowded professions. This is a feature full of encouragement.

We do not mean to say that heretofore agriculture has had *no* literature; for even among the ancients there were a few who seemed to embrace within their comprehensive grasp most that is known to us now. But that in this age the subject has been brought into well-defined and scientific principles, which are becoming widely-diffused among the masses who are occupied in the cultivation of the earth. At no period has there probably been more active minds engaged on any topic, than may now be found on the subject of farming, including all its various branches. For the next half century, at least, it promises to be *the* popular profession; and as our national safety and continuance depends on our being an agricultural people, producing within ourselves, as far as possible, the means of supplying our own wants, we are glad to see the young and zealous engaging in its healthy and ennobling pursuits. And while we urge upon them, the more modern literature of the farm, we would by no means exclude the Georgics, the writings of old Cato, Columella, or those who have occasionally appeared and written on the subject since.

With regard to new plans in the prosecution of our enterprise, we have scarcely a suggestion to make. The NEW ENGLAND FARMER is already established on a firm basis. Its publishers will spare no reasonable expense to make it hereafter what the farmer needs, in doctrine and spirit, and in such a becoming style in its appearance as shall do no discredit to the great improvements in the Art of Printing.

We have no important changes to announce—we contemplate none. Our Associate Editors will remain in the harness and fill their parts with their accustomed promptness and ability.

One fact we will mention before we close this, our first talk with you in the New Year. Out of the thousands of communications, (sometimes amounting to scores in a day) which have been received during the past year, in relation to all the business of the establishment, *there has not been one* finding fault with our course, or ordering a discontinuance from motives of ill-will or dissatisfaction. The mantle of your charity has fallen over our errors as silently as the night-dew upon the flowers.

And now may He who sustains us, each in his position, grant us another year of usefulness and kindly intercourse with each other.

A VALUABLE BOOK OF REFERENCE.

Some of the characteristics of the *Monthly Farmer* are,—

1. The elegant manner and convenient form in which it is printed; making a handsome volume for the library when bound.

2. The expensive engravings which illustrate the stock, plants, fruits, flowers, machines, buildings and fences which are described in its columns.

3. The absence of long catalogues of premiums and programmes, which are only of temporary interest.

4. Its articles spring from leading principles in the art of agriculture, and will, therefore, be as valuable to the learner any future year, as at the present time.

5. Its writers are nearly all men of practical acquaintance with the business of the farm.

6. Some of its writers are men of profound learning in the various arts and sciences, and particularly in chemistry, in its relations to agriculture.

7. The matter which has been collected and printed with so much care, is made easily available by a full and accurate index to the articles, and to the illustrations and names of correspondents; so that no time is lost in referring to anything which has been presented during the year.

These are some of the characteristics which stand out prominently in the work, and must be marks for commendation by every reader.

For the New England Farmer.

GREAT YIELD OF CARROTS.

GENT. :—I wish to call your attention to the statement of Dr. COOK, of Wendell, in relation to his manner of raising carrots. He stated to me when sowing them that he should do *great things* in the carrot line, but I had entirely forgotten what he said, until I saw his statement in the *Republic*. We do not consider the town of Wendell one of our best towns for good land, by any means; on the contrary, we regard it as a rough, hilly town with a good deal of poor land.

LUCIUS COOK'S STATEMENT.

The subscriber, a member of the Franklin County Agricultural Society, submits the following statements relative to the cultivation of a patch of carrots raised by him the current year.

Said carrots were raised on Wendell Hill, in said county, on the place whereon said applicant now lives. The exact quantity of land was three-fourths of an acre, and the number of bushels, or baskets, six hundred and fifty-one; and the number of tons, sixteen. This number of tons was ascertained by weighing four or five loads on the hay scales, as they were drawn from the field, and dividing the sum of their weight by the number of bushels or baskets, and finding them to average fifty pounds.

The land on which these carrots were raised had been mowed for eight years prior to 1850, when it was planted with potatoes, nearly all of which were destroyed by the disease, and were not worth half the cost of harvesting.

In 1851 the land was planted to corn, which was much damaged by worms, and afterwards set out to *Ruta Bagas*, which grew well and yielded a fine crop, but having no animals that would eat them except horses, they were kept through the winter in a cellar, and then thrown out for manure—the entire crops on the land not paying the expense of cultivation by one-half. On or about the 20th of May, 1852, the land was sowed in drills 18 inches apart to carrots, by a machine bought of Mr. Wm. Elliot, for the sum of three dollars and twenty-five cents, the land being first prepared by deep plowing with a common plow, then raked and levelled—about thirty loads of horse manure being spread on the land before plowing. The labor of preparing the land, sowing the seeds, cultivating and harvesting the crop, I contracted for at the commencement, for the sum of *seventy-five dollars*, which seemed to me and others as an extravagant price, but as some ston were to be removed in the job, I consoled myself with the belief that I might stand it "just this once." The crop has just been harvested.

As to the value of the carrots I have always believed them worth as much as oats, by the bushel, to feed to horses, which are the only animals I keep. Four or five tons of them I have sold at from $12 to $15 per ton; at $12 I could sell them all any day, and the sum would amount to $192. Add to this four dollars, a sum for which I sold the tops as they lay in the field, and four more dollars which I hope to get as premium, and the sum would amount to $200. Deduct from this $75 paid for labor, and $25 more for the cost of seed and my own care and skill—the last being a charge I make from habit—and it will leave $100 as the net income from the three-fourths of an acre.

Wendell, Nov. 15, 1852. L. COOKE.

THE SEASON.

On the 5th of Dec. last year, the ground had been frozen for several days, and had thawed but slightly during the middle of the day, so that all about this region of country the roads were hard, and nearly as smooth as plank roads. The 6th was bright and pleasant, but cold. On the 7th it rained a little. The 8th was moderate. On the 10th the roads were still smooth, and locomotives could have run finely on the common roads. At sunrise on the 11th, the thermometer stood at 12° above zero. Sunday, the 14th was pleasant; it commenced snowing early Monday morning, and about 5 inches fell during the day. Tuesday, the 16th the sleighs were running briskly. On Wednesday, the 17th, at Concord, 20 miles from Boston, one thermometer in the village stood at 20° below; another, a little north of the village, at 17°, and one north-west on higher ground at 10° below! There were then deep snows, good sleighing and stern winter weather for many weeks.

This year, on the 5th, the weather was mild and pleasant; the farmers were plowing, making wall, getting out manure, clearing meadows, and doing any of the autumnal work of the farm. The grass was green in the fields, where many cattle were grazing, and young cattle were still supporting themselves in the pastures.* A drizzling rain fell during a portion of the day, and similar weather prevailed until the 8th; that day was bright, warm, and beautiful. So were the 9th and 10th. On the 11th, there was a heavy fall of rain with east wind. It cleared off during the night, the wind hauled into the north and Sunday, the 12th, was a cold, bright morning with a clear, bracing atmosphere. Monday was damp and cool in the morning. At one o'clock it began to snow, and continued until dark, but only about half an inch fell. Tuesday, the sun rose clear, but it was not warm enough to thaw the snow. Wednesday, the 15th, was the coldest day up to that date. On the

*Pansies, or Lady's Delights, were in bloom in our garden, and in the vicinity we heard of rose bushes in full leaf with perfect blossoms.

morning of the 16th the thermometer stood at 10° above, a little before sunrise. Last year, it will be observed, it stood at 10, 17 and 20° below, at different points within a circuit of a mile, at Concord, Mass.

For the New England Farmer.

THE USE OF GUANO.

MR. EDITOR: — As *Peruvian Guano* has been used in New England only to a very limited extent as a fertilizer, and as every scrap of intelligence upon the subject is now of great interest and importance to the practical farmer, I send you for publication the following extract from a letter recently received from a gentleman in Virginia, who has very successfully used that article on the old, worn-out lands in that State. What is necessary to restore the exhausted soils of Virginia, is, *mutatis mutandis*, equally necessary to the same soils in Massachusetts; and as it regards the expense, guano, at fifty dollars the ton, is actually cheaper than manure at six dollars the cord. The extract which follows explains itself.

Waltham, Dec., 1852. D. C.

"You ask, is guano the best and most economical manure for hay and garden vegetables?" My own trials of it have chiefly been on the field crops of this region, namely, corn, wheat and clover. The effects of it on those crops are most admirable, as well as in permanently improving the soils. I have also applied it to my garden, and have used it as a top dressing to herdsgrass, but I cannot say that the effect on the grass or garden vegetable was very marked. Some friends of mine, however, have described its action on garden vegetables and on timothy as most excellent, and I have no doubt it is so.

I suppose if a new garden is to be made on poor land, it would be necessary to use vegetable manures as well as guano, to get the soil into the best state for culinary vegetables, or in fact for any kind of crop. Guano is composed chiefly of the azotised compounds and phosphates. A good, rich soil contains, in addition to these ingredients, the organic matter of vegetables. I find my fields constantly improving, as the growth of clover and all kinds of grass and weeds is promoted by guano.

We have in this part of our State various soils, namely, sandy and gravelly loams, stiff white clays, and the red clays. On the hard and gravelly loams, and on the white clays, the effects of guano are truly admirable, and also is on the pale red clays. On the dark red clays, I have been informed that its effects have not been so marked. If you wish to use it as a top dressing to grass land, you had better mix it with ground plaster of Paris, in the proportion of one part of plaster to two of guano. This tends to fix the volatile ammonia, and also furnishes a small quantity of lime to the soil. When applying guano to any crops at the time of planting, it should be plowed or harrowed in, two or three inches in depth, and should be broadcasted, and may be in quantity from one hundred to three hundred pounds to the acre.

My own belief is, that guano is the cheapest fertilizer, and the greatest boon ever conferred on a poor country. I doubt if it will ever fail on any poor lands, and think that you will not err in applying it to any such."

For the New England Farmer.

PROFITS OF FOWLS.

MR. EDITOR:—There has been an increasing interest taken in the subject of poultry, for the last few years. I have watched with interest for a result which is now realized, viz., that native fowls are more profitable than other breeds. There have been many statements made of expense and income from a stock of native fowls, invariably showing a profit; whilst I have never seen, if memory serves me right, but a single statement of fancy breeds, and that gave a loss. I saw in your paper of December 18, an account of the farmers' meeting in Concord, showing conclusively that poultry raising and egg-producing is profitable. I, too, would cast in my mite to serve the common cause.

The following is the account with my fowls one year, commencing Dec. 1, 1850.

On hand, 4 roosters and 74 hens and pullets, worth 50 cts. each.	
They consumed 41 bushels 12 qts. northern corn	$35,99
Do. 31 bushels 21 qts. flat corn	22,16
Do. 200 lbs. scraps	3,32
Interest on the worth of fowls	2,34
Less worth of fowls at close of year	10,00
Expenses	$74,31
Income—742.5 doz. eggs, at 15.5 per doz	115,84
Fowls sold	9,56
Income	$125,40
Subtract expenses	74,31
Actual profit	$51,09

Which leaves $1,28 gain on every dollar invested. It also shows a gain on each fowl of 65.5 cts.

Commenced the year 1851, Dec. 1, with 76 fowls, worth 36 cents apiece.	
They consumed 50½ bush. corn, at 81 cts per bush.	$11,26
Do. 136 lbs. scraps, at 16 mills per lb	2,11
Interest on the worth of fowls	1,64
Less worth of fowls at close of year	8,01
Expenses	$53,05
Income—374¼ doz. eggs, at 16¼ cts. per doz	61,65
Fowls sold	20,35
Income	$82,00
Subtract expenses	53,05
Profit	$28,95

Which leaves $1,02 gain on every dollar invested. It also shows a gain on each fowl of 38 cts.

My gain this year has been less for the reasons which follow, viz.: I killed off the best of my fowls, one-third part in March; and again I lost by accident perhaps two dozen. So that upon the whole this year shows the business to be as profitable as the year before.

I rejoice that this subject is receiving due weight in New England,—that fowl breeders are counting up the cost, and find in the result a handsome profit. I trust that the fairs this coming year will be ornamented with the native biddies, and that they will be allowed to take the first place in the county shows, as they certainly will at their owner's interest table. R. MANSFIELD.

West Needham, Dec., 1852.

GRIZZLY BEAR!—All who are desirous of seeing a specimen of the productions of that famous world, California, are advised to go and see the grizzly bear, now on exhibition at 19 Charlestown Street, Boston. The bill states that his actual weight is *over* 1700 *pounds!*

REMEDY FOR BOTS IN HORSES.

For many years past I have used a simple remedy for bots, and am almost disposed to call it "an infallible remedy," sure enough. But I can say, with truth, that I have never known it fail if administered at the commencement of the attack. Drench freely with sweet milk and molasses, (sugar or honey will do) well shaken together. Continue it, a bottle full every fifteen or twenty minutes, according to the severity of the attack, until the animal becomes easy ; then give a quart bottle full of strong salt and water, followed soon after with a quart bottle of Castor oil.

It is worse than idle to give anything with the view of killing the bots in a horse. The only plan is to convey them off; a sweet drench is the thing; they seize upon it with avidity, and in a little while will fill themselves, increasing at least one-third in size. In salt and water they will lie perfectly dormant for days together, hence the advantage in its preceding the oil. Whenever the bots attack a horse they will always be found at the neck of the throat, where a sweet drench is thrown immediately amongst them the moment it is swallowed by the horse. It is a great mistake to suppose that they are hid in some secret recess where medicine cannot reach them, and quite as great a one to suppose that a sweet drench will not divert their attention from the horse.—*Southern Cultivator.*

ADVANTAGES OF WARM WEATHER.

The autumn rains and continued mild weather have already materially aided the farmer in supporting his winter stock. If the weather should continue moderate until the first of January, we think there will be as much fodder on hand at that time as there was on the first of last January. The *Granite Farmer* of the 15th states that "young cattle and sheep have not required any feeding, and a good portion of the sustenance of other stock has been obtained from the fields to the present time."

At a recent agricultural meeting at the State House, at Concord, N. H., Gov. MARTIN, in his excellent opening remarks, stated that the hay crop of that State, in 1848, amounted to 680,000 tons,—which, at the average price of that year, $10 per ton—would give as the value of the crop $6,800,000. The present year he estimates there is a deficiency, compared with 1848, of at least one-fourth, 170,000 tons, which at $15 a ton, will give a loss to the farming interest of the State of $2,550,000. But this would only be a fact if the weather were the same under the same disparity in the amount of fodder, for a low temperature demands more nutriment, and of course more fodder. Therefore, the mild weather has been constantly decreasing this apparent loss, by a constant saving of hay and grain.

Some idea of the immense saving by the mild weather may be had from the following statement from the *Granite Farmer*. The editor says—

"Being at Hillsborough, the other day, we were informed by several very intelligent gentlemen that the amount of hay saved daily in that town was at least 40 tons. Last year, it became necessary to feed cattle some 45 days earlier than this season, but to give the advantage against our estimate we will say it was 30 days. This, then, would make a saving over last season in one town of 1200 tons, which at $15 per ton, would make $18,000. In this county, there are 31 towns, equal at least to 20 of the size of Hillsboro', and equivalent to it in an agricultural point of view. In the county, then, we have saved $360,000. Estimating that the ten counties in the State are equal to seven of the size of Hillsboro', and we have saved in the whole State $2,520,000—a sum nearly equal to the deficiency named by the Governor."

In Jefferson county, N. Y., according to the *N. Y. Farmer*, it is estimated that the saving in that county alone is *one hundred tons of hay per day!*

For the New England Farmer.

PECULIAR DIFFICULTIES OF NEW ENGLAND FARMING.

Extract from the Address of H. F. French, before the York Co. Agricultural Society, Maine.

WANT OF SYSTEMATIC ATTENTION.

The great and leading difficulty in the way of successful husbandry, in New England, is *the want of systematic attention to it, as a business*, resulting from a want of confidence that it is sufficiently profitable, a want of accurate knowledge of its principles, and a want of pecuniary means and of other facilities, to pursue it to the best advantage.

Agriculture, thus far, in America, has hardly been conducted as a business requiring the same care, and skill and training with other pursuits of life. The first settlers of our country, indeed, were in no position to pursue it with system. Their *first* endeavor was to protect themselves from the savages upon the coast,—their *next*, to clear away with steel and fire the grand old forests, and deposit in the virgin, fruitful soil, the seed, which gave them without much subsequent care, a bounteous return.

Generations passed away. The lands had been cleared, and the crops which could be obtained without skill, and with smallest labor, had been gathered. The best lands of nearly all New England, by this exhausting process, which cleared whole forests for the *ashes* of its noble trees, or for timber, then, of scarcely more value than its ashes, have thus been passed over.

The first fruits have been gathered. The first stage of progress in the new country has been finished. The earth will no longer yield to man her fruits, without *labor*—aye, and intelligent labor—labor joined with a knowledge of the principles of husbandry. We, who would *now* gain our daily bread from the soil, must do it, not only by the sweat of our brow, but by the travail of our brain also.

SKILL, EDUCATION AND CAPITAL NECESSARY.

It would be strange, indeed, if a business, involving the most complicated processes which philosophy and chemistry have revealed, should be the only one that could be successfully conducted without skill, without education, without capital.

Men study years to gain a knowledge by which to weave a fabric which shall cover human nakedness, and shelter their bodies from the heat and cold. Yet "behold the lilies, how they grow"—"even Solomon, in all his glory, was not arrayed like one of these," and yet the art of the husbandman brings him in close contact with the hidden processes of nature, which give the lily and the violet their color and their fragrance. Every bursting seed and every springing blade of grass, every opening bud and every perfumed flower and ripened fruit, is carried step by step to perfection, by principles as eternal as those which govern the courses of the sun and the stars. Every process of vegetation depends, for its results, on laws fixed and immutable as the swelling of the ocean's tide or the motions of the revolving earth; and with these principles and laws, the husbandman who casts his seed into the ground is constantly at work. And shall he alone, of all, who would attain to useful ends by well adapted means—shall *he alone*, in this great laboratory of nature, work blindfolded? It is true that many of her curious combinations of form and color, many of her mysterious workings in all her various departments, are now, and will ever be, beyond the power of human learning to fathom; but that is a poor reason why we should neglect carefully to observe her systematic course, and as far as may be, turn it to practical account.

KNOWLEDGE IS POWER.

Let the farmer realize that to *him*, as to others, *knowledge is power;* that the time has come when the same discipline, and system, and adaptation of means to desired ends, is as necessary to his business as to that of the mechanic, the merchant and the lawyer, and agriculture will at once rise from the position of a mere manual labor, to the dignity of a noble science.

When we undertake to follow out the inquiry, *why* agriculture, in New England, has been, to such an extent, neglected—*why* so little of systematic attention has been bestowed upon it, we shall, perhaps, be surprised to observe how many of the reasons result from the peculiar character of our political institutions, from the almost unbounded liberty of action secured to us as citizens of a republic.

This sentiment of an old poet has been often quoted with approbation:

> "For forms of government let fools contest,
> That which is best administered is best."

There is certainly but very little poetry in the lines, and I think less of truth than poetry. Indeed, it is interesting to observe, as we trace the differences, even between the laws of the liberal government of England and those of this country, how every principle of our Constitution influences every act and thought even, of our citizens, who are unconscious, perhaps, of the distinctions. Upon this topic I shall have occasion presently to remark further.

THE YANKEE PROGRESSIVE, BUT NOT STABLE.

As a prominent obstacle to systematic husbandry may be mentioned, *the want of stability in the habits of our people.* I say a want of stability in the *habits* of our people, for instability is certainly not a trait of New England *character*, but on the contrary steady perseverance with great energy and activity, are the marked characteristics of our citizens. Yet, looking at the *outside* of our community, there would seem never to have existed so fickle, so changeable, so whimsical a people. This is especially true, of their *occupations.* Look where you will, in city or country, a Yankee is always *progressing.* He is always seeking a change for the better. He has no *conservatism.* To-day he is a laborer in the field, holding the plow, or mowing. The next time we meet him, perhaps he is a clerk in a store, or a conductor on a railroad—then perhaps the editor of a western newspaper, and next a member of Congress.

Taking this hasty glance at the American citizen, one would take him for a sort of *wandering Jew*—a person possessed with the very *spirit of unrest.* But this, as I have said, is not, after all, so much an essential element of his character, as the result of his peculiar position in the world. The American is born, where the people of the Celestial Empire imagine *they* are, in *the middle of the world.* But he is fenced in by no Chinese wall, by no State or municipal embargo upon his movements. He is not born the heir of a title, and of vast entailed estates, upon which he must, of course, spend his life, bound to maintain the dignity of a long line of illustrious ancestors, and to help the queen keep her other and more humble subjects in their proper places. He is not fettered by legal enactments, which require him to submit to a seven years' apprenticeship, before he can exercise any mechanical art, nor is he born a serf upon the soil of a lord, doomed to grow up in an ignorance which binds him to a position of dependence and servitude more firmly than chains and fetters. On the contrary, he finds himself, at early manhood, without property, without rank or title, without wealthy friends to aid him, dependent on his own strong arm, and brave heart for his fortune. He is intelligent, educated, and thoroughly imbued with the spirit of liberty and equality, which he has drawn from his mother's breast—has caught from his father's lips—has breathed in the air which has been wafted from Bunker Hill and Lexington and Concord. He is bound to no soil, but to that of his country, and his country is bounded on the east and on the west by the ocean.

He knows what is passing everywhere. The press pours out her stories of the fertility and inexhaustible productiveness of the West, and of the wealth gained almost in a day from the mines of California. Steamers and railways can bear him, sooner than a single crop can be gathered from his native soil, to the teeming valleys of the western rivers, or the gold-bearing shores of the Pacific. He meets daily in the streets friends who report to him tales of suddenly acquired wealth—truth stranger than fiction—stranger than the eastern tales of genii, and the wonderful lamp of Alladdin.

What wonder, that to a young and hopeful heart, thus invited by prospects of wealth more dazzling than fairy tales have pictured, as he sat on his mother's knee in childhood, thus lured by Syrens, singing of easily acquired riches, of a brief period of excitement and danger followed by a life of ease and leisure—what wonder that he becomes dissatisfied with the slow degrees by which his fortune must be patiently wrought out in his native State, that he esteems the cultivation of the soil of New England a hard lot, and desires to try his fortune nearer the setting sun.

He is restrained by no considerations of the advantages of a quiet rural life, for no young man yet, ever had much fear of temptation, or doubted his ability to pass unscathed through its furnaces, though seven times heated.

And so, many of our most enterprising young men forsake their native land—some to re-appear on far distant shores, an honor to the State which gave them birth, leading with New England spirit the grand enterprises of moral and political progress—some to return by and by, successful beyond their hopes even, in their pursuit of foreign gold—some to wander back heart-broken and worn out by disease and want, their only hope to lay their weary bones in New England soil—many, alas! *how* many to fall by the wayside in the dreary land of strangers, with no friendly voice to cheer them on their last dark journey, or to bear back a son's or brother's farewell to dear friends in their loved and far-off home.

TRIES THE SHOE BUSINESS.

Besides the inducements to emigration so powerful at times as almost to depopulate whole villages in our eastern States, we have another cause of constant change. Many who remain among us, after a short experiment on their farms, abandon the cultivation of the soil as too laborious or unprofitable and adopt some other business.

It is the most common thing in the world, when, for instance, the shoe business takes a sudden start, to see scores of young men, who never before had an awl or last in their hands, leave their farm employment, and congregate together in some little seven-by-nine shop, making, after a week's apprenticeship, each about half a dozen pairs of what are appropriately called *sale shoes*. These young men, crowded together in hot and unventilated apartments, cramped over their benches without active exercise, soon show in their pallid faces their mistake, and when the business fails, as it does, I believe about once in five years, they look about them for means to mount another round of "young ambition's ladder," and select another occupation.

Perhaps a *profession* is next tried, for the world is open to all in this free land. Any citizen of good moral character, that is to say any man who has never been convicted of sheep-stealing, has a right by statute, in most of the New England States, to be admitted to practice as attorney at law, and any man who can buy, borrow or otherwise *come by* an old horse and a box of pills, may practice medicine, and as to *preaching*, many people among us seem to believe, as Dogberry said of reading and writing, that it "comes by natur" and not by education, and that the less a preacher studies, the more he gets by inspiration.

All these brilliant paths are open to the aspiring youth, and so the profession of the law is crowded with men who have no higher idea of their practice, than as as a game of sharps and quibbles and money-getting—who involve everybody who consults them in lawsuits, and who bring reproach and odium upon the very name of their adopted profession. And the quack doctor has even a better, because a less observed field of operation.

If he has wit enough to deal only in brown bread pills, a fair proportion of his patients will of course recover, and if he ventures with ill success into more dangerous experiments, he has only to sympathize with the surviving friends, walk demurely at the head of the funeral procession, while, like the good man we read of, though in a different sense, "his works do follow him," and the green grass soon covers all traces of his error.

SHAMS AND QUACKERY ENCOURAGED.

One effect of this perfect freedom for every man to do as a business, what seems good in his own eyes, is manifestly to encourage all sorts of shams and quackery, but still this freedom is in accordance with the spirit of our government, and is productive of more good than evil, on the whole. Often, worthy and brilliant exceptions are found to the course which I have so freely denoted, and the importance of keeping down all appearance of an aristocracy, except nature's aristocracy of true genius and genuine nobility of soul, will outweigh, in the end, the evil consequences to which I have referred.

The particular effect of this facility of change upon the agriculture of our States, as has been suggested, is to disturb and prevent anything like a regular and systematic course of husbandry, the absolute necessity for which is so apparent.

For the New England Farmer.

HARVEST HYMN.

RESPECTFULLY INSCRIBED TO THE FARMERS OF THE "NEW ENGLAND FARMER."

BY THE PEASANT BARD.

AIR—"*Dundee.*"

O Thou, whose wisdom decks the sod,
And loads with fruit the bough!
We thank Thee that the farmer's God
Peculiarly art Thou.

Thine are the seasons as they roll;
Thy years, how dread they seem!
From age to age is Thy control,
Deific and supreme.

When vernal skies and southern airs
Make green the sunny slope,
We turn the glebe with gleaming shares
And cast the seed in hope.

When Autumn pours her solemn light
Upon the fading fields,
Our garners filled to crowning height,
Show what Thy bounty yields.

Do Thou to us Thy grace impart,
Who on that bounty live;
The incense of a grateful heart
Is all that *we* can give.

Gill, Mass.

OUR JANUARY NUMBER.

We shall send this number to several gentlemen who have never taken the *Farmer*, and ask them to give it an attentive examination, and if approved, to aid in enlarging its circulation. If its present readers believe with us that it is of greatly more value to every farmer than its cost, will each one exert himself to forward us one or more subscribers for the coming year? During the last year we have sent out *over six hundred thousand* copies of the *New England Farmer.*—Shall that number be doubled in 1853? If you say so it can be done, and its value shall increase with its circulation.

For the New England Farmer.

LYCEUM LECTURES.

MR. EDITOR:—The notice from the Committee of the Board of Agriculture, in relation to this mode of diffusing information, is worthy of careful attention. There is scarcely a town or village in the community, where two hundred persons can be assembled, that has not its course of lectures, on some topic or other, during the winter. In some of these, the topics are designated by the managers; but more generally by the lecturers themselves,—and with little connection or order in the arrangement. Such miscellaneous discourses, with no definite purpose in view, may amuse for the time; but they never can be so instructive, as a well arranged series of lectures, on a particular subject. What topic can be of more universal interest than the culture of the soil! Although all may not engage with their own hands in tilling the ground; still, all do engage in the consumption of its products, and it will be difficult to find any, *high* or *low*, *male* or *female*, who would not receive benefit from attention to these subjects. If the community should manifest a disposition to encourage such lectures, without doubt, competent lecturers would soon appear; for in this, as in most other branches of business, there are always those who are quite as ready to work with their *heads* as with their *hands*. As suggested by the Committee, perhaps the season is too far advanced to admit of full courses the coming winter; nevertheless, *three months* would be ample time, for half-a-dozen lectures. And I hesitate not to say, that half-a-dozen lectures, well prepared, on agricultural subjects, would leave a more lasting and useful impression, than any course of Lyceum Lectures that have ever come to my knowledge. I am happy to know that the intelligent citizens of the county of Worcester have taken up this subject in earnest, and already engaged the services of Prof. Mapes, who has the reputation of being in himself a complete library of useful knowledge.

TWO ACRES.

The twenty-sixth meeting of the Germantown (near Philadelphia) Farmers' Club was holden at the house of PHILIP R. FREAS, on the 23d Nov. He is the editor of the *Germantown Telegraph*, a warm and active friend of agriculture, horticulture, &c., and the originator of the club. Though his whole plot of ground comprise less than *two acres and a half*, yet he manages to produce upon it, in perfection, a little of everything. Those who are sighing for more land will do well to read his statement carefully, and inquire whether it would not be wise to cultivate their present acres better, than to add to their number. The reporter at the meeting states in the *Telegraph* that during the present year there was cut two tons and a quarter of prime hay; there were patches of turnips, carrots, parsnips, beets, cabbages, (three kinds) onions, peas, frejole and half a dozen other kinds of beans; salsify, lettuce, okra, corn, (Stowell's Sugar, and Adams'); potatoes, pumpkins, (three varieties,) squashes, tomatoes, egg plants, asparagus in abundance, celery, (of splendid quality,) together with almost every other kind of vegetable to be found in the catalogue. His fruits consist of melons, six kinds of cherries, five kinds of plums, peaches; twenty-eight varieties of select pears; twelve varieties of apples; red, white and black currants; gooseberries, blackberries, and four varieties of raspberries, grapes, &c. &c. In the garden and mansion yard, there was a very choice collection of flowers, among them many select roses and rare vines. The ornamental trees consist of five varieties of the fir; the Japonica cryptomeria, the Deodar cedar, the Irish yew, and the American arbor vitæ; the European linden, the sugar and silver maples, the English and mountain ash, &c. &c.

In addition to these, there was a number of beautiful Polish fowls—black, white and spangled—and pea fowls, in the barn-yard—a fish pond in the garden—and a large number of choice fancy pigeons at the house. In all this there is an excellent taste displayed. We noticed that the house and offices were lighted with gas, warmed with a heater, and supplied with water from the public works. Baths, hot and cold, have for years been supplied by a reservoir on an elevated back building, holding some fifteen hundred gallons, which has also furnished pure, soft rain water for various parts of the buildings.

In the garden is a small green-house, excavated in the ground, say to the depth of three or four feet, framed up at the sides, raised a couple of feet above ground, and covered with glass. In this enclosure or pit, the usual shelves are arranged to receive the pots; and we are assured by Maj. FREAS, that it is the best possible provision for flowers and almost every description of plants in winter. Roses, particularly, flourish in much greater perfection. During the whole of the last unusually severe winter, but a single delicate night blooming jassamine was at all injured by the frost.

This green-house requires no artificial heat. In the hot-beds, we found cucumbers and cauliflowers up, lettuce heading, and spring radishes full grown. We may truly say, in regard to the "Telegraph Farm," that it is a farm in miniature; but in comfort, convenience, and taste, without any large pretension to mere costly elegance, it is a pattern "plantation," and would, in the full-growing season, afford compensation for a visit from any of our ponderous farmers. In a word, it is in the strict sense of the word, *a home*.

☞ Tuesday, the 28th of December, was one of the mildest winter days we remember ever to have witnessed. The thermometer stood at 60 in this city, from 1 to 4 o'clock P. M., and the showers, during the day, seemed more like June than December.

HUNT RUSSET.

Take it all in all, for productiveness, for the dessert, kitchen, for the home market and for exportation, and for its beauty of form and coloring, the HUNT RUSSET, we think, excels any other apple in New England, and stands at the head of them all! We say this considerately, after all the opportunities we have had of testing apples, and believe this to be the opinion of some excellent judges of fruit who have had occasion to compare this with many other varieties.

The first governor of Massachusetts, WINTHROP, purchased a tract of land for a plantation, and upon which he intended to reside, on the northwest bank of the river, in the beautiful town of Concord, about eighteen miles, and nearly west, from Boston. The land gradually rises until it reaches a height commanding a pleasant view of the subjacent country, including nearly all of the village, and the broad meadows on the banks of the river, then probably covered with forest trees. Owing to some domestic affliction, as was supposed, the governor never entered upon this land as a resident, and sold it to a gentleman from England, by the name of HUNT, whose descendants in a direct line own and occupy a considerable portion of the land at the present time.

It was this purchaser of the land from Governor WINTHROP who introduced the apple portrayed above. From inquiries which we have made among the descendants of old Deacon *Simon Hunt*, it appears that the tree originated and occupied a site near the highest point of land in the tract. This land is now owned and occupied by Capt. NATHAN BARRETT, one of the largest and best farmers in that ancient town. We have repeatedly visited his farm, examined his trees and their products, and believe that he entertains the opinion we have expressed of the Hunt Russet. He puts up several hundred barrels of apples this year, and among them a large portion of this favorite. So far as we have been able to trace the history of this apple, we believe that all the trees of this variety now growing in New England sprung from the tree planted on the old Indian Hill in Concord, by Mr. Hunt.

We are inclined to think that the Hunt Russet is identical with the apple described by Cole, Downing and Thomas, as the *English Russet*. The reader will observe that our engraving answers Mr. Downing's description of the English Russet which we copy below. He says the "stalk is rather small." In the engraving above the stalk is rather large, but is true, as the whole portrait is, to life.

The fruit, (as Downing says of the English Rus-

set) is of medium size, ovate, or sometimes conical, and very regularly formed. Skin yellowish-green, nearly covered with russet, which is thickest near the stalk. Calyx small, closed, and set in an even, round basin, of moderate depth. Stalk rather small, projecting even with the base, and pretty deeply inserted, in a narrow, smooth cavity. Flesh white, tender, with a pleasant, mild, slightly sub-acid flavor.

The tree is a little slow in coming into bearing, but once producing fruit, bears every year; is hardy and of handsome shape. We have seen the apples *two years old*, fair, plump and juicy, kept on a shelf in the cellar with no extra care whatever, and have kept them ourselves a year in good condition. It bears a high price in the market, selling quick at $5 a barrel in the market last spring, and is rapidly gaining the popular favor.

The above is the opinion we have formed of this fruit from raising, using and comparing it. But we advise no one to adopt our opinions without careful inquiry and investigation for themselves.

For the New England Farmer.

THE SEASON OF 1852 AT WILMINGTON AND VICINITY.

BY SILAS BROWN.

MESSRS. EDITORS:—It often happens in the summer, in the time of drought, that an accumulation of clouds at a distance indicate an approaching shower, but on a nearer advance, they split and display at the right and left and disappoint the anxious expectants of a refreshing fall of rain. It is not uncommon, in a dry time, for a succession of such illusive showers to wend their way over the dusty and thirsty earth without any regard to the fasting and prayers of poor sinners below. The town where I formerly lived was visited by two or three dry summers in succession, and the promising appearance of showers followed by the split in the clouds extremely annoyed a neighbor by causing him such scanty crops; he considered his farm to be located right under the "crack in the clouds," as he called it; the whim wrought upon his mind so forcibly that his only remedy was to sell and purchase in a more fortunate place, where clouds were not subject to such rents as to hold no water. In this vicinity we have been highly favored with showers of rain through the summer; instead of the splitting of the clouds and passing by us on either or both sides, nebulous fragments have collected into dense bodies, directly over us and poured down their contents in a profusion of rain.

After an uncommon cold winter and backward spring that destroyed a large proportion of young fruit trees in this neighborhood, the weather changed suddenly the 5th day of May to very warm, which continued till the 9th and gave incipient vegetation a fine start. Fruit trees of various kinds began to blossom the 22d day of May uncommonly full, which had an elevating effect upon the one who was so unfortunate as to be troubled with the depressing effect of the "blues." We had frost on the mornings of the 19th and 20th of May, too early to injure cranberries and other fruits; June 3d, a great shower; 6th and 12th, frost on low land which was supposed to be the cause of the scarcity of cranberries this fall, the tender shoots that produce the fruit were just starting from the old vine at that critical time; 14th, very warm; 15th, light thunder shower in the morning; 16th and 17th, extreme heat, and shower at 5 P. M., 17th; 18th, soaking rain in the morning; 22d, thunder shower commencing at 9 A. M., which lasted all day and supplied us with a drenching rain, while at 10 miles distance but very little fell, and the spectator, at that distance, could see the clouds congregating and discharging their contents in great profusion in some particular localities, while others continued dry; 25th, slight shower and cooler; 29th, grows dry; 30th, shower, warm and growing time; July 2d, soaking thunder shower, A. M.; 8th to 14th, extreme heat, and top of ground dry; 14th, soaking shower; 15th and 16th, warm; 17th, rainy; 19th to 25th, warm and good hay weather; 26th, drenching rain from N. E.; 27th, to August 1st, good hay weather; 5th, great rain from N. E. and cool; 7th, rain; 9th to 11th, cloudy, but little rain; 12th to 14th, good hay weather; 16th to 18th, cool nights; 19th, warm and dry; 20th, sudden change, wind to N. E., and cloudy and dry to 26th, then a fine shower; 29th, a drenching N. E. storm, which lasted to the end of the month, when the fate of the crops was decided for the season.

The first hard frost was on the morning of 30th September. There has been a good supply of fall feed, a favorable circumstance to those who have not a full supply of fodder, as well as to the producer and consumer of butter. Early potatoes were "small," indurated and glutinous after being boiled, owing to the extreme heat in July; The late ones were much better and afforded us an average crop. Chenangoes and long whites, two of the best old varieties, were the only ones which showed the symptoms of the regular epidemic rot, while different varieties growing from seed derived from Vermont were sound. Cranberries and peaches scarce. Apples abundant; corn and rye an average crop; all kinds of garden roots and vegetables never better; upland hay good; meadow hay very light.

The forests, the ornament of our hills and worn-out lands, were not behind our cultivated trees and plants in progressing, for the purposes of lumber and fuel. The fall, thus far, has been rather cool and cloudy, but we have had a plenty of rain and a good supply of water in our wells, a greater antidote to sickness than "rum and tobacco too." There have been more biles and fewer fevers than commonly fall to the lot of mortals by the way of afflictions and mercies, as many of us can testify, the past season; it is possible that the former may be a preventive of the latter. Providence has not stinted us in any of the good things conducive to health and comfort, for which we have reason to elevate our minds in gratitude to that great Being who directs the courses of the clouds, governs the destinies of the crops and shews such favors as the rewards of industry. S. B.

Wilmington, Oct., 1851.

☞ A gentleman just returned from California, states that Baldwin apples have been selling by the barrel at an average of twelve and a half cents

each. At retail, apples sometimes sell as high as fifty cents each. ☞ You need not postpone setting that apple orchard any longer, Mr. D.

STATE BOARD OF AGRICULTURE.

Met, Wednesday, Dec. 1, 1852.

Col. Wilder presented the Transactions of the Michigan State Agricultural Society, for 1851, from its secretary J. C. Holmes, Esq., and the Transactions of the N. Y. State Society, for 1851, from B. P. Johnson, Esq., its Corresponding Secretary. He also presented packages of seeds from Professor Fowler, one of which the Professor had received from the Messrs. Gibbs, seedsmen to the Royal Agricultural Society, of England, and the other from Mr. James Cuthbert, an eminent seedsman, in Liverpool. The thanks of the Board were voted to these gentlemen, and the Secretary directed to send them, and the N. Y. and Michigan societies, copies of our State Transactions.

Mr. Proctor submitted the following resolutions, which were unanimously adopted.

Whereas, in the Providence of God, the late Hon. John W. Lincoln, of Worcester, a member of this Board, has been removed by death, at a period of life when many more years of useful labor might have been hoped from him:—

Resolved, That the industry, integrity, and zeal in the promotion of every commendable enterprise, which marked the character of the deceased, have impressed us with the highest respect for his memory.

Resolved, That we heartily sympathize with the Society he represented, and with the friends of the deceased, in the loss sustained by the death of this worthy man; and in token of respect, direct that this expression of opinion be entered upon our records, and a copy thereof forwarded to the relatives of the deceased, and to the Society he represented at this Board.

Col. Wilder, from the committee to nominate a Secretary, made the following report, which was adopted.

The Committee to whom was referred the nomination of a permanent Secretary of this Board, respectfully report: That the names of several distinguished persons have been presented, and their qualifications have been under consideration of the Committee.

The Committee regret that they have not been able to agree upon a nomination, and they respectfully ask for further time.

In consideration, however, of the fact, that the Annual Abstract of the Returns of the County Societies, and the Report of this Board must soon be put in course of publication, the Committee recommend that the present Secretary, pro tem., Hon. Amasa Walker, be requested to make up the compilations of the Agricultural Transactions of the Commonwealth, for the year 1852, together with the report of this Board, and to perform such other duties as are incumbent on its Secretary.

Mr. Lawton was requested to report on the Housatonic Society.

The Secretary was directed to make up in small packages, the seeds presented by the Messrs. Gibbs and Cuthbert, and distribute them to such members of the Board as will make thorough trial of them, and report their experiments in detail to the Board.

Mr. Walker then reported on the Norfolk Society. He was also directed to take measures to secure a report, from the several societies not heard from, by requesting those who had that duty assigned them to report at the next meeting of the Board.

At the meeting of the Board in July last gentlemen were appointed to visit the several agricultural Exhibitions in the State, and report upon them to the Board. These reports now being in order.

Mr. Proctor reported on the Berkshire County Society.

Dr. Reed, reported on the Hampshire Society.

Col. J. W. Lincoln, having deceased, to whom was assigned the Hampshire, Hampden, and Franklin Society, it was voted that Gov. Boutwell be requested to make a report upon this Society at the next meeting of the Board, he having been present at the exhibition of that Society.

Mr. Walker reported on the Worcester West Society, and was requested to report on the Middlesex Society, no report being presented from that county.

Mr. French, from the committee to nominate three members of the Board, as representatives to the General Board of the United States Agricultural Society, reported the names of

John W. Proctor, of Essex,
Henry W. Cushman, of Franklin, and
Simon Brown, of Middlesex Societies,

and they were unanimously elected.

The Board then adjourned to meet at 3 o'clock, P. M.

AFTERNOON SESSION.

The Secretary presented the resignation of Mr. James S. Grennell, (Mr. G. having left the State,) from the Franklin County Society, which was accepted.

On motion of Mr. Smith, the Secretary was directed to notify all the members of the Board of the time of the next adjournment.

Mr. Walker reported upon the best means of promoting the interests of Agriculture in the State, by public lectures. He thought, as a prominent means, that familiar lectures before the Lyceums in the towns would effect an immediate and practical benefit.

The report was referred to Messrs. Walker, Proctor and Hitchcock, to recommend individuals to lecture on agricultural subjects when applied for to the Board.

Dr. Reed reported on the importance of establishing *Farmers' Clubs* in each town in the State.

The reports made were full, instructive and in-

teresting, and upon several of them animated discussions arose.

There seems to us to be prevailing in this Board a spirit determined to progress in the right way. Every man takes the laboring oar himself, while the *efforts of all* are directed to a single point,—*the true principles and practice of agricultural improvement*. They are not the efforts of a newly-awakened love, or the proselyte's zeal, to glitter like ephemera in the morning sun, and then grow cold and die, but the well settled convictions that the labor of the farmer is often misdirected, so that its true reward is not obtained; that the nature of the soils he cultivates and the operations of the great atmospheric ocean which surrounds him and feeds his crops, are so little understood as to leave him incessantly laboring in doubt and uncertainty as to the modes of culture which he adopts. So far, there has been an earnestness and energy exhibited in the Board which promises important results; and these, whatever they may be, will become common property, as the transactions of the Board and the State will annually be published.

We only give the details of business, leaving the reports, &c., to speak for themselves when distributed.

VEGETATION IN CALIFORNIA.

At a meeting of the *Farmer's Club* at the rooms of the American Institute, in New York, several gentlemen spoke of the wonderful productiveness of the soil and vegetables which spring from it.

According to the information derived from Mr. Shelton, almost every variety of fruit appears to flourish with very little attention in California. The apple, pear, peach, apricot, quince, plum, nectarine, pomegranate, fig, grape, and olive, are now growing there in the greatest perfection. It is the firm conviction of Mr. S. that no country in the world surpasses California in the production of these fruits.

Mr. S. appears to regard the production of onions as the most astonishing. They grow very large and mild there, and are eaten like apples. Mr. Horner raised about 50,000 lbs. on one acre, and they were worth about $20,000. General Vallyo raised 80,000 lbs. on two acres. Mr. Shelton said that he had seen a field of onions, averaging a pound wt. each. Fifty of them would weigh from two to four pounds apiece.

Potatoes also grow to a very large size, some of them weighing three pounds each—and have to be cut up in order to boil them well—125 pounds had been obtained from five stalks. Mr. Horner had raised from 250 to 300 bushels of potatoes per acre, without manure.

Mr. Dyer said that he had seen radishes in California as large as his arm, and perfectly free from strings or hard fibres. Mr. Shelton stated that these radishes were fit for table in thirty-one days. He represented that lettuce grew there in great variety, and are very fine—some of them attaining the size of a man's hat, and weighing from three to four pounds each. At San Francisco he had seen the tomato growing all winter. Grapes considered to be far superior to the Catawba; from one to seven pounds on a stem could be raised with very little trouble. He had seen branches weighing upwards of ten pounds each.

Mr. S. stated that there were no less than twenty varieties of clover growing there. The white clover grows three feet high.

In answer to some questions asked relative to procuring ice, Mr. Dye said that their supplies had been principally obtained from Boston, and sold at from 10 to 12 cents per pound. Frozen snow or hail had also been obtained from the mountains packed in gunny bags and blankets. This was sold for the same price as the Boston ice.

Mr. Shelton has brought with him about a thousand specimens of pressed flowers, grasses, trees, &c., also a colored drawing of a great variety of native flowers of great beauty, which are deserving the attention of florists. He has likewise presented to the American Institute about 200 varieties of flower seeds from California.

On land owned and cultivated by Mr. James Williams, an onion grew to the enormous weight of 21 pounds. On this same land a turnip was grown which equalled exactly in size the head of a flour barrel. On land owned and cultivated by Thomas Fallen, a cabbage grew which measured, while growing, 13 feet 6 inches around its body; the weight is not known. The various cereal grains also grow to a height of from 5 to 12 feet; one red wood tree in the valley, known as Fremont's tree, measures over 50 feet in circumference, and is nearly 300 feet high.

Added to these astonishing productions are a beet grown by Mr. Isaac Brannan, at San Jose, weighing 63 pounds; carrots, three feet in length, weighing 40 pounds.

At Stockton, a turnip weighing 100 pounds. In the latter city, at a dinner party for twelve persons, of a single potato, larger than the size of an ordinary hat, all partook, leaving at least the half untouched.

Mr. Dye corroborated the statements of Mr. Shelton, and related some additional interesting particulars. He had noticed in the San Jose valley, which is 78 miles long, and 60 miles across in the widest part, a particular sweet kind of wild clover, which the natives eat with great relish. So thick was the growth of this clover, that when the dry season of the year comes, he has seen thousands of acres covered with the seed of the bur clover to a depth of two inches. On this happy provision of nature, the cattle feed during the dry season. Mr. Shelton showed some specimens of this seed, of which he had collected three bushels on 18 feet square. He had collected sixteen varieties of clover, of which he exhibited specimens. The blossoms of some are very rich. He formed a boquet of clover-tops alone. He had exhibited some of these specimens in San Francisco, and they had been very favorably noticed by the papers. One variety called the "Mammoth Shelton Clover" was very large. The roots covered a space of 8 feet, and the stalks grow to a height of 10 feet. In Maraposa county there was a large growth of acid clover, of which the natives made drink, resembling our lemonade.

Mr. Dye said that the trees in California were very different from the varieties bearing the same name here.

Rev. Mr. Fitch remarked that the dry season begins in June, and continues to November. It rarely occurred, during that time, that they had any rain; neither were there any dews. In reference to the certainty of the dry season being uninterrupted, Mr. Shelton related an instance in which he had seen hundreds of acres of barley and oats which had been cut down, and let lie in swaths on the ground for two months, without injury. Mr. Dye related an instance, near Sacramento city, where three crops of wheat were taken, without any second plowing or sowing;—the first crop produced 50 bushels to the acre, the second 30 to 40 bushels, and the third crop from 20 to 30 bushels. He considered that there was as large a proportion of arable land in California as in the State of New York. Mr. Shelton stated that Horner & Beard had inclosed four leagues (4,400 and odd acres to the league) with an iron fence. He had walked one fenced field of 8 miles.

Mr. Shelton said that he had frequently in his room one dozen heads of cabbage, weighing from 50 to 60 pounds. One, a perfectly solid head, weighed 56 pounds, and was seven feet in circumference. He gave an instance of a spruce tree, 300 feet in height, and 50 feet in circumference.

Of grapes, in California, Mr. Dye said they were as good as those grown in this State. He did not think they were indigenous, except in the mountain districts, where he had met a small, sour description. Rev. Mr. Fitch said that the arable land was about one-third in proportion. It was an erroneous opinion that vegetation could not go on without irrigation. Without irrigation, they could, at all times, have one crop in the year; and where irrigation was introduced, vegetation went on throughout the year. He had seen three crops taken in the year. The oats grew wild, high and thick, on the hills, and in the valleys.

Mr. Shelton exhibited a California potato, over a year out of ground. They grew to a very large size, and were sweet and floury, when boiled. In speaking of vegetables, Rev. Mr. Fitch remarked that the vegetables of California were very superior for eating to those grown here. There, he could make a meal of a turnip, or on potatoes; here he could not eat much of either with impunity. The beet was very fine, growing to an extraordinary size, and was sweet, and uniform in color to the centre, unlike the large beet grown here which is often stringy.

☞ We notice by an article in the *Canadian Agriculturist*, that the public debt of Canada was $4,635,999, on the 1st of August last.

By the same paper we observe that the average crop of wheat, per acre, in Upper Canada, is nearly 15 bushels; barley, 21, rye, 12; peas, 15; oats, 26½; buckwheat, 14½; Indian corn, 24; potatoes, 64; turnips, 212. In Lower Canada, where the acre is about one-seventh less than in Upper Canada, the average crop is of wheat, 7 bushels; barley, 15; rye, 8; peas, 7; oats, 15; buckwheat, 10; Indian corn, 18; potatoes, 60; turnips, 95.

This average is much less than that of our hard, rocky New England soil. A portion of the soil n Upper Canada is probably not surpassed in fertility by any in the States. Why, then, are their crops so much less?

CORN SONG.

BY JOHN G. WHITTIER.

Heap high the farmer's wintry board!
Heap high the golden corn!
No richer gift has autumn poured
From out her lavish horn!

Let other lands exulting glean
The apple from the pine,
The orange from its glassy green,
The cluster from the vine.

We better love the rugged gift
Our rugged hills bestow,
To cheer us when the storm shall drift
Our harvest fields with snow.

Through vales of grass and meads of flowers,
Our plows their furrows made,
While on the hills the sun and showers
Of changeful April played.

We dropped the seed o'er hill and plain,
Beneath the sun of May,
And frightened from our sprouting grain
The robber crows away.

All through the long, bright day of June,
Its leaves grew bright and fair,
And waved in hot midsummer's noon,
Its soft and yellow hair.

And now, with Autumn's moonlit eyes,
Its harvest time has come,
We pluck away its frosted leaves,
And bear the treasure home.

There, richer than the fabled gifts
Apollo showered of old,
Fair hands the broken grain shall sift,
And knead its meal of gold.

Let vapid idlers loll in silk
Around their costly board;
Give us the bowl of samp and milk,
By homespun beauty poured.

Where'er the wild old kitchen hearth
Sends up its smoky curls,
Who will not thank the kindly earth,
And bless our farmer girls!

Then shame on all the proud and vain,
Whose folly laughs to scorn
The blessings of our hardy grain,
Our wealth of golden corn.

Let earth withhold her goodly root,
Let mildew blight the rye,
Give to the worm the orchard's fruit,
The wheat-field to the fly;

But let the good old crop adorn
The hills our fathers trod;
Still let us, for his golden corn,
Send up our thanks to God!

A SIBERIAN WINTER.

A traveller in Siberia, during the winter, is so enveloped in furs that he can scarcely move; and under the thick fur hood, which is fastened to the bear-skin collar and covers the whole face, one can only draw in, as it were by stealth, a little of the external air, which is so keen that it causes a very peculiar and painful feeling in the throat and lungs. The distance from one halting place to another takes about ten hours, during which time the traveller must always continue on horse-back, as the cumbrous dress makes it insupportable to wade

through the snow. The poor horses suffer at least as much as their riders, for besides the general effect of the cold, they are tormented by ice forming in their nostrils and stopping their breathing.—When they intimate this, by a distressed snort and a convulsive shaking of the head, the drivers relieve them by taking out the piece of ice, to save them from being suffocated. When the ice ground is not covered by snow their hoofs often burst from the effects of the cold. The caravan is always surrounded by a thick cloud of vapor; it is not only living bodies which produce this effect, but even the snow smokes. These evaporations are instantly changed into millions of needles of ice, which fill the air, and cause a constant slight noise, resembling the sound of torn satin or thick silk. Even the reindeer seeks the forest to protect himself from the intensity of the cold. In the Tundras, where there is no shelter to be found, the whole herd crowd together as close as possible to gain a little warmth from each other, and may be seen standing in this way quite motionless. Only the dark bird of winter, the raven, still cleaves the icy air with slow and heavy wing, leaving behind him a long line of thin vapor, marking the trace of his solitary flight. The influence of the cold extends even to inanimate nature. The thickest trunks of trees are rent asunder with a loud sound, which, in these deserts, falls on the ear like a signal gun at sea; large masses of rocks are torn from their ancient sites; the ground in the tundras and in the rocky valleys cracks, forming wide yawning fissures, from which the waters, which were beneath the surface, rise, giving off a cloud of vapor, and become immediately changed into ice. The effect of this degree of cold extends even beyond the earth. The beauty of the deep solar star, so often and so justly praised, disappears in the dense atmosphere which the intensity of the cold produces. The stars still glisten in the firmament, but their brilliancy is dimmed. —*Travels in the North.*

For the New England Farmer.

WINTER LECTURES.

BY WILLIAM C. BROWN.

The *New York Tribune* of the 4th inst. has an article on Popular Lectures, in which occurs the following paragraph:—

"We would suggest the propriety of leaning less on scholars and persons of literary habits for the delivery of lectures, and of valuing more highly the inculcations of practical men. If our most intelligent and capable artisans, our best instructed and most successful farmers, our prominent and scientific inventors, could oftener be induced to assume the lecturer's platform, and give the people of their own and the neighboring townships the best results of their studies and experience, the lectures would be more useful, and, ultimately, more popular than they now are."

Here is a suggestion worthy the consideration of all persons interested in the delivery of lectures during the winter months. This custom has become so prevalent, and bids so fair to become universal, that it demands the earnest inquiry of good men, how popular lecturing shall be conducted, so as to secure the best results to the public.

If mechanics and farmers were called upon to deliver lectures, such a call would prove a powerful incitement to the work of preparation, and the knowledge obtained under such circumstances, *con amore*, would be vastly more valuable than mere school learning; and it would not be long before lecturers, self-taught, intelligent and practical, would multiply on every hand, and still the increase be less than the demand for them. The labor of self-preparation would become infectious; and we should behold the novel and wonderful sight of whole communities cheerfully engaged in studies of a character every way calculated to exalt and dignify the human mind. It would be difficult, if not impossible, to make an estimate of the vast amount of good which would flow from this. Vicious and trashy amusements of every kind would gradually fall into disrepute, as they already have, to some extent, principally through the influence of popular lectures.

There can be no doubt, that there is a great amount of talent in our farmers and mechanics lying dormant. We can conceive of no course better adapted to arouse and develop this talent, than the one suggested. Its development would prove a blessing to the nation, not to be estimated by gold and silver. We should soon find men of genius, intelligence and eloquence springing up all over the country, and their example would prove a powerful stimulus to the younger portion of the community.

Such lecturers as we have described, would not be very likely to choose abstruse and metaphysical, but practical and useful subjects—subjects suited to the tastes, capacities and pursuits of the great body of the people, who, in a government like ours, should always be first considered in all projects of enlightenment and improvement, for in them dwells the sovereign power.

Such lecturers, also, would be less expensive than professional men, and this would not only enable cities and large towns to have more lectures, but would enable small towns, now without them, to establish every winter, a course.

The *Tribune* speaks of one of the results of popular lectures, which we think of the highest importance. We cannot do better than to copy the paragraph:—

"One of the good results of popular lecturing is its tendency to assemble the entire movable population of a village, or rural township, and make them better acquainted with, and more kindly diposed to each other. If lecturing did no other good than this, it would be of great value. Our division into religious sects, tends to alienate and estrange us from each other. The lecture-room must become the Social Exchange—the place where acquaintances are made and friendships cemented; and we would suggest the expediency of a general agreement to assemble from half an hour to an hour prior to the commencement of the lecture, for the purpose of social intercourse and general conversation."

A NEW SOURCE FOR GOOD FRUIT.—Should our present liquor law remain in force it will benefit our farmers in a way of which the originators of that law did not dream. We have thousands of apple trees, of natural fruit, in every town in the State, the crops from which have in former years been made into cider, at a very small profit to the owner. These trees, if the law is sustained, will be grafted over, and pay him a five fold increase on his present receipts. We farmers need just such a rap over the knuckles as this to awaken us to our true interest.—*Middlesex Farmer.*

SOUND MAXIMS IN FARMING.

[The following remarks are from an old pamphlet which accidentally came into the hands of our correspondent "P.," who has kindly sent them for publication. They are well worth remembering.]

The gentleman of fortune, whose farm is his amusement, may wait years for his reward. The common farmer wants his pay down. Plans of improvement have been recommended, practicable indeed to the man of wealth, but wholly uninteresting to the mass of farmers, because beyond their means. They can adopt no system which the *farm itself* will not support. It is a maxim in husbandry, that no mode of management is worth pursuing, that will not give a profit; and that is the best which will afford the greatest profit with the least labor and expense.

Great crops may be obtained at great expense; but if the labor and expense is not remunerated, the crops themselves will be ruinous. The question is, not how a great crop can be obtained? But how can it be obtained in a manner to pay? It is not a valuable improvement in husbandry to increase your productions, if your expense is proportionably increased. The great object is, to increase the productiveness of a farm, so that the expense may bear a less ratio to the increase. By purchasing more land, you impose a burden on yourself difficult to sustain. Many have been impoverished, and not a few have been ruined, by possessing themselves of land for which they could not pay. The intelligent farmer, before he plunges into debt, will not fail to attend to this plain question. Will the income of the intended purchase more than repay the interest, the labor and the taxes? If not, you are better without the land. The possessor of more land than can be improved is a tax upon the owner.—*Rev. Dr. Eaton's Address, Oct.*, 1822, *to the Farmers of Essex.*

SUSCEPTIBILITY OF ANIMALS TO ATMOSPHERIC CHANGES.

In the common sensations of life, we perceive a distinction, according as the exciting cause is agreeable or otherwise, whether it presents itself as pleasure or dislike, bodily strength or weakness, activity or fatigue, warm or cold—by pressure or tension of the atmosphere, &c. By these combinations of sensations, all animals in which they are strongly developed are enabled to anticipate atmospherical changes before the most delicate instruments give any indication of them; and, in a minor degree, the same is traceable in persons of great nervous susceptibility. In the animal world it extends not only to creatures of the land and of the air, but also to those which inhabit the water.

The actiniæ throw out their feelers and expand themselves when a continuance of fine weather is to be expected, but withdraw and contract themselves, even in a room, when a change is impending. The mussels, before the approach of a storm, spin several new threads to secure their hold on the rocks; and leeches rise to the surface of the water before rain. Spiders enlarge their webs during fine weather, but spin only short threads, work seldom, or hide themselves in corners, during rain. Many beetles, by their active flight and humming sounds, give tokens of the morrow's brightness. Before rain, bees remain either in their hives or in the neighborhood of them; and ants convey deep into their hills the pupæ which they expose to the sun in fine weather.

The leeches rise anxiously to the surface of the water before a storm, and hence in Germany they are called weather-fish, and are kept in glasses, where, by their uneasy movements, they denote a change twenty-four hours in advance; and, from the same cause, many fish forsake the sea for the rivers; the groundling is roused into activity, the silurus leaves the deep waters, and the eels become lively. If the lightning strikes the water, the perch sickens and dies; the snake and the slow-worm are restless before a storm; toads leave their concealment before rain; ducks are busily active, and swallows fly lower.

Before a storm breaks forth, many birds, such as the cross-bill and plover, are uneasy, and show themselves less; and while many species of waterfowl hurry for shelter to the shore, the petrel, as if rejoicing in the coming conflict of the elements, dashes forth and defies its power. If the atmosphere be lowering in the morning, pigeons feed rapidly, and return to their cots; and the hare hides itself; but the mole comes to the surface of the ground, and the squirrel seeks its nest, and shuts its entrance. This susceptibility of atmospherical changes, influences, also, materially, the natural economy of some animals; the wild rabbit, for instance, which feeds chiefly in the evening or at night, comes forth at noon-day if the weather portends rain, and loses its natural timidity in its eagerness to procure food.

Before the occurrence of an earthquake, animals become uneasy. In that which took place in Calabria in 1783, it was noticed by Bartel, that the sea-fish were disturbed, and were taken in vast numbers; many birds fluttered about distressed in the air; dogs ran about howling; the horses and oxen trembled, pawing the ground and snorting as if in agony, and the cats slunk about with their hair bristled up.—*Thompson on Animals.*

Transactions of the Wisconsin State Agricultural Society for 1851.—This is the first agricultural publication of the young and flourishing State of Wisconsin, and is certainly creditable to the enterprise of her citizens. The volume contains 336 pages, on good paper and type, and is printed handsomely. The society was formed in March, 1851, and here we have in a little more than a year this large and well-filled volume of its operations. The Address by John H. Lathrop, Chancellor of the University of Wisconsin, is a well digested and valuable paper, and, scattered among the people, will have an important influence in awakening them to the importance and connection of their several vocations. The reports from the counties combine a great deal of statistical, geological, and geographical information, which is thus brought together for the benefit of the whole State. The communications upon *breaking up the prairie, manures, flax culture*, and one upon *butter making*, from Mr. Dodge, of Essex, in this State, are admirable papers on the subjects which they discuss.

We, who have made "Indian hills" on the Atlantic shores long before the world beyond the Mississippi was scarcely dreamed of, shall have to be on the alert or our younger brethren will be treading on our heels.

For the New England Farmer.

GATHERING AND PRESERVING WINTER FRUIT.

BY WM. F. BASSETT.

MR. BROWN:—The preservation of fruit depends much upon the location and the season. In this section apples probably ripen nearly or quite two weeks later than on similar soils and exposures in the vicinity of Boston, and in different portions of this country there is even *more* variation caused by the nature of the soil and exposure to sun or wind.

The difference of seasons from one extreme to the other, would, I think, vary the time of ripening from two to three weeks more, thus making five or six weeks difference in the maturity of fruit between a cold season in a late section, and a warm season in a warm section of the State, and I think, there should be nearly an equal variation in the time of gathering; on this point, however, there seems to be some diversity of opinion. Downing says the practice is to let winter fruit remain on the trees as late as possible, or until there is danger from frost. Others say pick it before fully ripened and let it wilt. I should dissent from both these methods as going to extremes; the first, as injuring the keeping, and in some cases the quality of the fruit, and the last as materially deteriorating the quality, without much advantage in the preservation.

So far as my experience goes, both the keeping and eating qualities of the winter apples, in general cultivation here, are much the best when the fruit is picked just late enough to allow it to mellow without any appearance of wilting.

The Rhode Island Greening, if suffered to remain on the trees beyond that time, frequently becomes mealy and cracks open at the season when it is generally fit for use, and the Baldwin is liable to lose its taste much sooner than it otherwise would.

As to the particular time of the year to commence picking, so much depends upon the circumstances named in the first part of this article, that no particular directions can be given, but it must be left to the judgment and experience of the cultivator.

If these opinions are correct, any particular variety will of course keep best in that locality where the season is just long enough to ripen it; and where the climate is too mild, it will succeed best in the shortest summers.

Several years observation, however, have convinced me that after the fruit has once commenced growing, its forwardness is much less affected by temperature than is that of most other kinds of vegetation, and that its time of maturity depends more upon the time of blossoming than upon the warmth of the weather afterwards.

With regard to the cellar in which apples are to be kept, I do not consider myself very well qualified to decide, as my experience on that point has not been sufficiently diversified, but I think it depends much more upon temperature than upon moisture.

Downing says the most favorable soil for a fruit cellar is sand or gravel, with a slope to the north, but I should prefer to have it excavated in what is commonly denominated "hard pan," not however very wet. The poorest cellars for keeping fruit that have come under my observation are warm and wet.

We had on the 1st of March last, Rhode Island Greenings in our cellar in first rate condition, and Baldwins, nearly all of which were as sound as when they were gathered last fall, the cellar in which they are kept being dug in hard pan, and the crevices of the wall filled with mortar; the surface was also more or less frozen nearly half the the winter.

In looking over an old volume of the *Cultivator*, I see it stated that one extensive fruit-grower has had good success in keeping apples, by putting them in a large heap a little raised from the bottom of the cellar, and pouring over them water sufficient to wet the whole, two or three times a week; but this I think would be no evidence in favor of carrying them into the cellar damp, or having them dampened by moisture arising in the form of vapor from the bottom of the cellar, as the advantage, if any, from the use of water in this case, I should attribute to the washing and the reduction of temperature consequent on evaporation.

I believe it is the practice of many to allow their apples to stand in barrels above ground as long as the weather will admit.

On this point Cole, in his fruit book, says, where the cellar is cool and airy it is the best course to put them into it immediately after they are picked; with this I should fully agree. W. F. B.

Ashfield, 1852.

REMARKS.—It was our intention to publish this article the first of September, but it was overlooked. We perfectly agree with our correspondent that "much more depends on temperature than on moisture," whether the cellar keeps fruit well or not. A friend of ours had 60 barrels of the most perfect "Hunt Russets" last March, which were placed in a cool cellar as soon as they were gathered. During the day the doors were kept closed, and at night opened until the weather became so cold as to endanger their freezing. They were then barrelled, removed to another cellar, where they remained till April. This cellar, is wet and the temperature so low that water on the bottom froze early in the winter and remained so until spring. He then found the apples, so far as he examined them, in excellent condition. It is, as a general thing, the warmth which occasions rapid decay.

STABLING STOCK.—An exchange says, when farm stock is kept in well littered stalls, and every other judicious means taken to manufacture manure, one head will produce sufficient to keep an acre of ground in the highest state of fertility. We know this from experince.

☞ "*Rats is Riz.*"—The price of ladies *kid* gloves has gone up from 70 to 80 cents per pair!

For the New England Farmer.

LIME—GUANO—BONE DUST.

Mr. Editor:—Does the application of lime to the soil supply the phosphates, or bone-forming material? Guano, bone dust and wood ashes are said to contain a great amount of lime in various combinations, but it seems to me they are expensive manures. Ashes I have tried with good effect, but have had no experience with lime. I can procure it for $1,50 per cask, and ashes for 12½ cts. per bushel. Common stable manure, applied at the rate of 25 ox loads to the acre, and plowed in eight or nine inches deep, proved to be unsuccessful in causing a great yield of corn, but potatoes grew nobly. Why this difference? A long time before the corn ripened, it commenced falling every way, the stalks appearing weak. This, with former years' experiments, has proved that something else is needed beside plentiful manuring and deep plowing. My soil is a moderately light loam, with a subsoil of yellowish loam and gravel, and no traces of clay or sand, except in particular localities. My pastures and tillage land border on pine land of similar formation. My cows, when giving milk in summer, appear weak in their limbs, and fairly disgusted with the Rhode Island Bent, up to their eyes around them, and if they can get into the mow lands after haying, they will feed it down to the roots, even, rather than eat the pasture grass.

L. L. R.

Seekonk, Mass.

Remarks.—The application of lime alone supplies but one of the materials of which bone is formed. Phosphoric acid is wanted also. Guano contains the phosphates both of ammonia and lime, as well as their carbonates. During the process of vegetation, the phosphates are decomposed.—The phosphoric acid is combined with the fixed alkalies, lime and potash, and in this state is appropriated by those plants that require them. The ammonia, after being separated from the phosphoric acid, is decomposed into its elements, hydrogen and nitrogen, and these elements are used as wanted. It is by the decomposition of ammonia that plants obtain nitrogen chiefly.

L. L. R. has not presented his case with sufficient fulness of detail to enable us to prescribe a remedy, with confidence. We have not all the symptoms. How much corn did he get to the acre? Was the corn sound and the ears well filled? How deep below the surface is the subsoil of "yellow loam and gravel?" How did he cultivate? Did he hill up the corn in the old way, or cultivate with a level surface? When corn grows very rapidly, and begins to spread, drawing the surface soil around the plants with the hoe, and forming a hill, for temporary support, may be resorted to with advantage. We see no reason why such a soil as he describes, in which potatoes "grew nobly," should not yield good corn, unless it be that silex and sulphur are wanting. Potatoes require as much lime, and more potash, than corn.

We will suppose manure is worth to L. L. R. $1,50 per load.

His 25 loads will cost	$37,50
Let him plow in 16 loads, worth	$24,00
Then take 2 cwt. guano, worth	5,00
2 casks lime, air slacked	3,00
5 cwt. plaster	2,00
2 barrels fine sand	25
	$34,25

add two or three barrels good soil that has laid under his hen roost through the winter; mix all thoroughly upon a floor, and put a half pint into each hill. Immediately after the first hoeing let him him take 16 bushels of wood ashes worth $2,00, and apply upon the surface around the plants. This will make $36,25, leaving $1,25 to pay the extra labor of applying the ashes. Ashes or quick lime should not be mixed with guano. They decompose it too rapidly, and the ammonia being very volatile, is mostly lost before it can be appropriated by the plants. Let L. L. R. try this prescription, and report his success. Bone dust is the best "bone-forming material." Mix it with salt, and keep it within reach of your cattle. If this material be wanting, they will use it freely.

For the New England Farmer.

LIME IN AGRICULTURE.

Much has been written upon the use of lime in agriculture, and yet the subject does not seem to be fully understood; some persons need "line upon line" just as some soils need lime upon lime.

Lime is an element in all organic structures. The earthy portion of the bones in the higher classes of animals consists mostly of lime combined with phosphoric acid. The shells of the lower classes consist of lime combined with carbonic acid. All parts of the animal structure are derived from vegetables. Vegetables then must, as lime is not a constituent of the atmosphere, it must be contained in the soil.

According to Johnson's table, 1 bushel of wheat contains 6 and 2-5 ounces of lime, a bushel of barley 6 1-9 ounces, oats 2 3-5, a ton of turnips a little more than 6 lbs., a ton of potatoes 28 lbs., and a ton of clover hay 63 lbs. These quantities vary considerably. This is especially true of wheat. When the soil is plentifully furnished with lime, wheat contains a larger per centage. The skin of the grain is said to be thinner, and the flour whiter and finer and more glutinous.

In soils that consist largely of clay, the benefit of lime is most obvious. It loosens the texture of the soil, and renders it less adhesive. It combines with acids and thus sets at liberty other alkalies that may be contained in it. It is beneficial to soils containing large quantities of vegetable matter, as it appears to render such matters more soluble, and more useful to the living vegetation. Almost every crop that is cultivated is improved by it. It is said to be injurious to flax and hemp, rendering their fibre thinner and more brittle. Compounds formed in the soil by lime are comparatively insoluble. Hence it is from 3 to 6 years before lime applied to the soil is exhausted. The hydrate of lime, or lime slaked with water, acts the most rapidly. Carbonate of lime produces the most permanent effect upon the soil. Light, dry,

sandy soils containing little vegetable matter, are not those which are most benefited by lime; such soils already contain an abundant supply.

There is one error with respect to the use of lime which should by all means be avoided; that is, the mixing of lime with the manure heap, whether in a fermenting or quiescent state. Ammonia abounds in animal manures, combined with phosphoric, carbonic muriatic or other acids. These salts of ammonia are decomposed by lime, which combine with their acids, and expels the ammonia, an element which is of great importance to vegetation. Probably the best methods of applying lime are to spread it upon the soil before planting, and mix it in with the harrow, or to sow it as a top dressing, soon after the coming up of the crop.

Vegetables that contain, in a perfect state a large amount of lime, may attain their full size without an adequate supply, but they will not be perfect plants. Lime is an important ingredient in clover; it is found chiefly in its cuticle or covering membrane. If this grass is grown upon a soil consisting mostly of vegetable matter, and under the stimulus of animal manure, it will lodge, or break down from its own weight, for want of the strength or stiffness which a due proportion of lime would impart to it. Potatoes contain a large per centage of lime, and there can be no doubt that for some years past those that have been raised under circumstances that precluded a sufficient supply of lime, have been more liable to disease than those that could obtain an abundant supply of it.

Potatoes that have grown in low land where the soil consists largely of decayed vegetable matter, or which have been raised by animal manures, have been affected by the rot much more than those which have been raised on sandy soils, or by means of plaster, which is sulphate of lime.

Vegetables that are perfect in their organization, in due proportion, will better [illegible] exposed to its causes, than those that are deficient in any one element—indeed, this remark may be made more general—it may be applied to all living organized beings. The more perfect they are in structure, and the more normal in growth and proportion, the more perfect will be their health, and the greater their power to resist disease. I hope not to be misunderstood. I would by no means intimate that the absence of lime has anything to do with the origin of the potato disease. I do not know that diseased potatoes have been subjected to chemical analysis, to ascertain whether they are deficient in this element, or that those varieties that are most liable to disease have been compared analytically with those that are less so. The solution of these questions merits the attention of the agricultural chemist, if it has not already received it. But I have no doubt that the dry, mealy potato contains more lime than the wet, soggy one—or that those that have grown on dry land with an abundant supply of lime have rotted less than those that have grown under other circumstances.

The analysis of soils, and the analysis of plants, requires to be carried on together.

The cultivator needs to know the composition of the plants which he proposes to cultivate, and the composition of the soil in which he proposes to cultivate them, that he may judge of the adaptedness of the one to the other, and be able to modify the soil to suit the demands of the plant.

Concord, Mass. J. R.

For the New England Farmer.

WARTS ON PLUM TREES.

MR. EDITOR:—I have about 150 young plum trees, and last fall I found a few warts on them. I cut them all out and took the precaution to burn them. This last spring and summer I kept watch, and as soon as one appeared I removed and burnt it. In the last of the summer I found most of the trees affected the same way, and some of them were literally covered with small warts.

I wish some of your readers more experienced in the culture of the plum would give me a remedy.

Yours, W. R. C.

REMARKS.—We can join in the request of our correspondent with as much feeling as he expresses himself, for we are suffering from the same cause, and can find no remedy. A portion of our plum trees are nearly whittled away, and the only benefit derived from the operation, has been the *pleasure of whittling* with a good sharp knife. The warts insist upon coming, while the tree grows "beautifully less" every day.

BARRY, in his "Fruit Garden," says the cause probably originates in an imperfect circulation of the sap, induced by violent changes of temperature, and recommends cutting out the diseased part as a certain cure, and covering the wound with grafting wax. But that has been resorted to in a great many cases without the slightest benefit. Who will study, watch and experiment, and find out the long sought for remedy? We trust those that are wise on warts will let their light shine on this

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THE WAY THE RUSSIANS TREAT THEIR HORSES.

The Russian coachman seldom uses his whip, and generally only knocks with it upon the footboard of the sledge, by way of a gentle admonition to his steed, with whom, meanwhile, he keeps up a running colloquy, seldom giving him harder words than "*My brother—my friend—my little white pigeon—my sweetheart.*" "Come my pretty pigeon, make use of your legs," he will say. "What now! art blind? Come, be brisk! Take care of that stone there. Dost see it? There, that's right! Bravo! hop, hop, hop! Steady boy, steady! What art turning thy head for? Look out boldly before thee! Hurra! Yukh! Yukh!

I could not help contrasting this with the offensive language we constantly hear in England from carters and boys employed in driving horses. You are continually shocked by the oaths used. They seem to think the horses will not go unless they swear at them, and boys consider it manly to imitate this example, and learn to swear too, and break God's commandments, by taking his holy name in vain. And this while making use of a fine, noble animal he has given for our service and not for abuse. There is much unnecessary cruelty

in the treatment of these dumb creatures, for they are often beaten when doing their best, or from not understanding what their masters want them to do.

The man who is driving a cart will often stop on a cold winter's morning, and fancying a glass of ale will warm his inside, leave his horses standing in the cold till their legs are stiff; then he comes out half intoxicated, feeling he has lost time, and that his horses must make up for it. So before they perceive him, for he has covered their eyes with blinders, he gives them a great lash, and the poor beasts start, and finding their legs stiff with cold, do not at first go as quick as he wishes. And then he gets angry and curses the poor beasts, and lashes them about the head and on the most tender parts, endangering their eyes—which are very prominent—with the end of the lash. The drink and the using this bad language, make him get in a passion—for making use of angry words gives rise to bad feelings—and *all* have an uncomfortable journey. His horses, whether his own property, or entrusted to him by his master, are the worse for the treatment, and the man becomes brutal and hardened.

Now a merciful man is kind to his beast, and a really good driver knows that creatures that are kindly and steadily treated do better and go more willingly. I rode outside the *Free Trader* one morning. It had three fine horses harnessed to it. The driver mounted his box, and put his long whip into a hole in the box, buttoned his coat, and called *tchick, tchick*. Away the horses set off and went willingly and briskly, till he saw a passenger waiting to get into the coach. "Wo—wo!" he cried out. Immediately they stopped and the man got in. "Right!" The docile creatures pricked up their ears and off they set again. The same thing was repeated many times, and the horses always obeyed directly. The man looked proud of the fine obedient creatures in such good training, and the whip had an idle life of it, for they went far more willingly without it.

HONEY BEES.

The *Albany Cultivator* has an interesting article on honey bees, from the pen of a distinguished professor, from which we quote the following paragraph: "Many—nearly everybody—suppose that the bee culls honey from the nectar of the flowers, and simply carries it to its cell in the hive. This is not correct. The nectar it collects from the flower is a portion of its food or drink; the honey it deposits in its cell is a secretion from its mellific or honey-secreting glands, (analogus to the milk-secreting gland of the cow and other animals.) If they were the mere collectors and transporters of honey from the flowers to the honey-comb, then we would have the comb frequently filled with molasses, and whenever the bees have fed at the molasses hogshead. The honey bag in the bee performs the same functions as the cow's bag or udder, merely receiving the honey from the secreting glands, and retaining it until a proper opportunity presents for its being deposited in its appropriate storehouse, the honey-comb. Another error is, that the bee collects pollen from the flowers accidentally, while it is in search of honey. Quite the contrary is the fact. The bee, while in search of nectar, or honey, as it is improperly called, does not collect pollen. It goes in search of pollen specially, and also for nectar. When the pollen of the flower is ripe, and fit for the use of the bee, there is no nectar; when there is nectar, there is no pollen fit for its use in the flower. It is generally supposed, also, that the bee collects the wax from which it constructs its comb from some vegetable substance. This is also an error. The wax is a *secretion* from its body, as the honey is; and it makes its appearance in small scales or flakes, or under the rings of the belly, and is taken thence by other bees, rendered plastic by mixture with the saliva of the bees' mouths, and laid on the walls of the cell with the tongue, very much in the way a plasterer uses a trowel."

For the New England Farmer.

RAISING AND SELLING MILK.

Mr. Editor:—I notice an article in your paper of the 9th inst., containing some very pertinent inquiries and just reflections upon the subject of "Raising and Selling Milk." I am but a novice in the *practical* business of farming, but believing in the doctrine of "*progression*," I am anxious to learn whatever may truly advance the interest and happiness of the farmer. Experience is said to be a dear school, and therefore he is wisest who learns from the experience of others. But it often appears to me that farmers, above all other men, pay most largely for their schooling, while many are but little disposed to profit from the one source or the other.

I live in a town which is said by some to produce more milk for Boston market than any other town in the State. Be that as it may, most of the farmers here raise milk to sell. When I commenced farming I determined to know for myself the relative advantage of selling milk and making butter. Having made a sufficient number of experiments under varying circumstances, I found the mean quantity of milk required for a pound of butter to be *nine* quarts. This quantity, at the price paid here in summer, would amount to *eighteen cents*. I determined to make butter rather than sell my milk. The inquiry made by your correspondent is, Does it pay to raise milk to sell at 2 or 2 1-8 cents per quart? From what little experience I have had, I should answer an emphatic no! And I will give a reason or two for the "faith that is in me."

First of all, keeping a stock of cows and selling their milk, carries a large amount of yearly product clearly from the farm, without any return in fertilizing compensation to the land, unless purchased with the proceeds of the milk from foreign sources. This no man would think of doing who raises milk to sell at 2 or 2 1-8 cents per quart. The result therefore of selling milk from a farm at such prices, is the *impoverishment* of the farm as surely as would be the selling of the greater portion of its yearly product of hay. Another fact in connexion with the selling of milk from a farm, which largely contributes to this impoverishing result, is, that farmers who sell their milk raise little, if any pork, and are therefore deprived of the valuable labor of swine in the manufacture of manure.

If a farmer cannot afford to purchase manure whereby to compensate his land for the product of milk taken from it, then it is clearly a losing busi-

ness, because "always taking from the meal chest, and never putting in, will sooner or later come to the bottom." But so long as farmers prefer present *apparent* gain to future *positive* profit, so long will they continue to sell their milk at 2 cents per quart. Your correspondent thinks the farmers alone to blame for this low price for milk. True, he is, just as all laborers and producers are, to blame for the oppression which capital inflicts upon them. Capital has got its heel upon the neck of labor, and so long as men's moral and intellectual energies are cramped and undeveloped by the present over taxation of his physical powers, so long will the laborer bear his burden of oppression.

You, Mr. Editor, nor your correspondent, are willing to say that those engaged in the commerce of milk get more than their share of its value, but you both think the farmer gets too little. In this, few farmers I think will disagree with you. But when you, Mr. Editor, intimate that from the fact that mechanics and other laborers have to pay high prices for farm products, that farmers "get prices high enough as an average on all they sell," I think you put forth a specious argument for the continuance of the low price of milk. For however high "farm products" may be to the consumer, it is notorious amongst farmers, at any rate, that for other products as well as milk, the farmer is but poorly paid for the amount of labor and capital expended. Farmers do not get the high prices which the consumer pays; far, very far from it. The truth is, there are too many *stand betweens*—by far too many distributors of the products of labor—Labor is burdened with the maintainance of altogether too many *non-producers*. And until farmers and other laborers have moral and intellectual energy sufficient to lead them to associate together for their mutual defence against the oppression of capital and the maintainance of drones, they must continue to give about three-fifths of their earnings for the support and gratification of others. Let no one suppose I undervalue services of the needed distributor of the products of labor—but when three men have to be paid and maintained for services which could as well or better be performed by one, it is time to look about and see where the "pay" is coming from. But there is no good reason why the farmers of a town who raise milk to sell, should not associate for the purpose of selling their milk to the consumers, and also for the purpose of selling any other product which may be rendered into a steady business.

I like the suggestion of your correspondent, and think it is highly expedient that farmers should hold a "CONVENTION," and if they cannot do without a "*platform*," make one, only let them be sure to make it large enough that all may stand upon it without any "bolting."

Yours truly, T. A. S.

Westboro', Oct., 1852.

REMARKS.—We see no reason, from our correspondent's remarks, to change our expression at all. If his products pass through three or four hands before they come to the consumer, he must combine with his neighbors, and supply the consumer himself. There can be little doubt that the "huckstering" business is carried too far, and that many of the productions of the farm pass through too many hands before they reach the consumer.

We reside in a strictly agricultural town, and have seldom found it difficult there to get 25 cents a pound for butter, (and it is bringing now 27) 15 to 25 cents a dozen for eggs, 9 to 12 for salt pork, 50 to 80 cents a bushel for potatoes, 80 to 100 cents a bushel for corn, and other products at equally high rates. We sold last year of our own raising between one and two tons of fresh pork for about 8 cents a pound, and were recently told that in a neighboring agricultural town good salted pork was selling quick at 17 cents a pound. These prices amply sustain our remarks, as quoted by our correspondent.

The evil to the farmer does not lie in low prices, but in a want of combination and system, such as the merchant and manufacturer put in operation the moment they find their interest demands it.

HOUSE PLANTS IN WINTER.

"What is the reasen that my plants do not grow so well as Mrs. Jones's. I am sure I take a great deal more pains with them, and water and nurse, and air them, but all will not do; they are weak, slender, sickly, and some of my best plants have died—while Mrs Jones seems to take very little care of hers, and yet they grow and bloom beautifully!"

This appeal to us for aid and advice, which has just been made, is not the first complaint of this kind of ill success. The truth is, some plants are actually nursed to death. Care and attention bestowed on plants, *which they do not need*, are worse than no care at all. It is knowing *just what to do*, and doing that, and no more, that gives some persons their success. Or, as a late writer remarked, there are two great points to be attended to—

1. Not to *let* your plants suffer by neglect; and
2. Not to *make* them suffer by interference.

We would class the requisites for good treatment as follows:—

1. Plenty of light.
2. A due supply of water.
3. Proper temperature.

Fresh air, cleanliness, and good soil, are obviously of importance, but are less likely to be neglected than the three first named wants, and we shall therefore add a few additional remarks under these heads:

1. *Light.*—Plants cannot by any possibility have too much of this. The stand should therefore face the window, and be placed as near to it as practicable; and the window should be broad, as little obstructed in its light by outside trees as the nature of the case will admit. But rapidly growing plants require most light; hence, such should be placed more directly in front of the window.

2. *Water.*—This must be given according to circumstances. A plant in nearly a dormant state, needs very little—those in a rapidly growing condition require considerable. Too much water will make the latter grow slender, but they will bear a greater supply if in a strong light. It must be remembered as a standing rule, that dormant plants may remain comparatively in the dark, and with little water; and growing ones should have a

good supply of water and a full supply of light.—But it must not be forgotten that green-house plants generally are nearly dormant during winter, and the soil must therefore be kept but moderately moist, as the plants in this condition do not pump any moisture from the soil, and little escapes directly by evaporation. Drainage, by filling one-fifth of each pot with charcoal, is of importance.

Temperature.—Many house plants are destroyed by too much heat, which increases the dryness, and both these causes together are more than they can endure. A cool room, never as low as freezing, is best. From 50 to 55 degrees is much better than 65 or 70, the ordinary temperature of living rooms.

Syringing the foliage with tepid water, to wash off whatever dust accumulates, is of use; and the admission of fresh air, when there is no danger of chilling or freezing the foliage, should not be neglected.—*Albany Cultivator.*

PLOWING ORCHARDS.

In an article on old apple trees, recently, we spoke of the effect of plowing upon the roots, and suggested that great caution should be observed in cultivating among them. The remarks below are from two or three speakers who took part in a discussion at one of the agricultural meetings held by the members of the legislature in Maine, last winter. We suppose the gentlemen were not speaking of orchards just planted, but of old orchards, or those that are in bearing. These remarks will have a tendency to make us all more careful with the plow among our trees.

"Mr. Foster said, he was satisfied that it was not a good plan to plow and cultivate the land in orchards. Plowing wounded the trees, broke off the roots, and produced disease. It was best to select a spot for the orchard, which the farmer would never want to plow. He recollected a case which confirmed his theory. He was called upon, by a farmer, to graft his orchard. The orchard where the grafting was to be done had been prepared with great care, plowed often, and the trees pruned closely. By its side, stood another orchard in a pasture. When he went into the orchard for the purpose of grafting, the trees he found were much diseased. He thought he would examine the trees in the pasture, as they were planted at the same time, in like soil, and the only difference in their management was that while the trees in the enclosed orchard had been pruned closely and ploughed among, those in the pasture had been left to grow pretty much as they would. The trees in the pasture he found sound,—the wood white clear through. He was satisfied that ploughing, breaking the roots as it must in every direction, was bad treatment for the orchard.

Mr. Boothbay, of Saco, would subscribe to the doctrine that ploughing in an orchard was detrimental to the trees. It was his experience. He had several trees in a pasture, situated near a spring where the stock went to water. In the summer, the stock would go to the spring for water, and, having slacked their thirst, would lie down under the trees, and stamp around them, keeping the ground porous. The trees had flourished finely and bore well, while he could not say so much for his trees situated elsewhere.

The Chairman, Col. Smart, of Troy, said that he had been as it were, reared in an orchard; he concurred with his friend Foster, somewhat, in his ideas respecting ploughing an orchard. A brother of his had taken three crops of wheat from his orchard, and he was aware that the trees had suffered materially in consequence, and that injudicious tilling had caused it to decline. Several years ago, his son took a considerable quantity of muck from a low spot where flags grew, and carted it into the orchard, and spread it among the trees, and he thought the process increased the yield of the trees very much.

For the New England Farmer.

APPLES.

Mr. Editor:—At the last exhibition of the Middlesex Agricultural Society in Concord, we noticed among the superb display of fruits on that occasion, a number of varieties of Apples, (which were new to us) of very great size and beauty; but as the "orders of the day," would not permit us to judge of their quality except by the *outward appearance*, which you well know is not always a sufficient datum upon which to pronounce a righteous judgment; and as we saw no one present of whom we could obtain the desired information, we were obliged to leave without having our curiosity fully gratified. Among these, were the Golden-Sweet, and Harrison Apple, presented by Mr. J. Wetherbee, of Marlborough, and the New-York Baldwin, of which we do not recollect the contributor. We also noticed some new varieties (Seedlings, we believe) in the extensive collection of Mr. Eustis, of South Reading. Now we are aware, that "all is not gold that glistens," and that "a new broom *usually* sweeps clean," and we know equally well that some kinds of fruit which make a very brilliant display in a horticultural exhibition, are totally worthless, in fact, a complete nuisance, to everybody except the amateur cultivator. We do not know, however, that this is the case with those varieties we have mentioned; and if Mr. Wetherbee, or any other reader of the *Farmer* who has cultivated these varieties, will give us through your columns, an account of them, describing the fruit, its size, quality, the bearing habits and growth of the trees, we should be much obliged to him.

Of the Northern Spy, we do not recollect of seeing a single specimen. As this fruit is getting to be extensively spread, and as its success in New England is at least problematical, (it being a New York apple), we should like to know if any one has made a sufficient trial of it, to determine its value as a variety for extensive orchard culture. Its character should be better known.

By the way, we conceive that the columns of an Agricultural paper could not be better occupied than by devoting a reasonable space to the dissemination of such a knowledge of the different varieties of fruit, their defects, as well as their desirable qualities, as might serve as a guide to the practical cultivator. It is only after a thorough and extended trial, of any fruit, that its good or bad qualities, its productiveness or unproductiveness can be determined; and if those who possess the requisite knowledge would impart the fruits

of their experience to others, they would confer a great benefit upon the fruit-growing community, and save many a tyro in this branch of business, from the disappointment and vexation which the failure of well recommended fruit seldom fails to occasion.

There are four qualifications which we consider essential in a first rate fruit.

1st, it should be of *good size.*

2nd, of *good quality.*

3d, it should be *handsome.*

4th, it should have *firmness* and *consistency* enough in its texture to bear transportation without material injury from bruising.

The Baldwin and Hubbardston Nonsuch, are good examples of this latter quality. The *tree* should be a *free* and *healthy grower*, and, withal, an abundant bearer. A deficiency in *any one* of these qualifications, is a material drawback upon its value as a market fruit. With regard to *color*, we think (as a general rule), a *red* or *striped* fruit most desirable for the market, as being more showy and per consequence, like many other commodities, more saleable. We do not think a *very large* apple, is a desideratum.

Perhaps the Hubbardston Nonsuch is the ne plus ultra, in this respect. Large apples are more liable to fall from the tree before they are fully matured, and it is seldom the case that such varieties produce well. As there are but very few varieties, especially of winter apples, that are No. I. in *all* the particulars we have specified, we think our country agricultural societies would do well to offer liberal premiums, with special reference to the discovery and propagation of new and desirable seedling varieties of fruit, particularly of winter apples. The time may come when our most valued varieties will fail us.

Yours respectfully, W. D. TUTTLE.

Acton, Mass.

WHAT GUANO IS MADE OF.—As guano is getting to be one of the vexed questions of the day, the following analysis of outer Lobos Guano, recently made in London, has an interest, particularly to the agriculturist:

Salt of Ammonia	7½ parts.
Animal organic matter	8½ do.
Sulphate of Muriate of Potash and Soda	12½ do.
Phosphate of Lime and Magnesia	52 do.
Sand	18 do.
Water moisture	11½ do.

Liebig says that one pound of guano imported into a country, is equal in value to eight pounds of wheat, or twelve and a half cents. It was stated a day or two since, that ten tons of guano at $30 per ton, was worth to the farmer $600 net profit.

For the New England Farmer.

GREAT YIELD.

Mr. B. W. KINGSBURY, of this place, raised the past season, from three seeds of the citron melon, *seven hundred and ninety-four pounds* of melons; the largest weighing twenty-three pounds, and quite a number of them weighing twenty each. These vines came up accidentally and received no extra manure or care. J. H. & SON.

Newton Centre, Nov. 24th, 1852.

REMARKS.—That beats California taters, pumpkins and perhaps melons. Pro-di-gious!

UNITED STATES AGRICULTURAL SOCIETY.

It is an old saying, not without foundation in truth, that *Providence helps those who help themselves.* Ever since the foundation of this government, the leading minds in the country, engaged in other pursuits than those of agriculture, have appreciated the importance of systematic efforts for its advancement, and especially of aid in *some form* by Congress. Nearly every President, including Washington, has made recommendations to this effect in his messages, but as yet nothing worth naming has been effected.

The reason is not difficult to find, and it is this; that the farmer himself has taken no interest in the matter, and on the theory of our text, has deserved no help from the "powers that be."

At last, however, we have the beginning of better things. A National Agricultural Convention, called, at the suggestion of the Massachusetts Board of Agriculture, was held in Washington last June, and *The United States Agricultural Society* was formally established. Hon. MARSHALL P. WILDER, the man of all the world who best deserved the honor, was elected President. A Vice President was chosen for each State and territory, and an executive committee of five members, a corresponding secretary, recording secretary, and treasurer for the society.

A *Board of Agriculture* is provided for by the Constitution of the Society, the duties of which are thus prescribed.

BOARD OF AGRICULTURE.

"It shall be the duty of this Board to watch the interests of Agriculture as they are or may be affected by the legislation of the country; to make such reports, memorials and recommendations, as may advance the cause of agriculture, promote and diffuse agricultural knowledge, to examine, and when necessary, report upon the practicability of establishing agricultural schools, colleges and model farms, to set forth the advantages of agricultural and geographical surveys, and to show the importance of science to agriculture; to represent, through their report, the relation of American Agriculture, to that of foreign countries, and endeavor to obtain information from such countries; to point out the advantages of introducing any new staples, seeds and plants, and obtain, as far as practicable, annual statistical returns of the condition of agriculture throughout the different States, all which information shall be published by the Society and form part of its transactions."

Some discussion was had as to the mode in which it was expedient that government aid should be rendered to the cause. Objections were made to the establishment of a Department or Bureau of Agriculture, by Government, on the ground that it was not constitutional, and that it would, if established, be liable to the political changeableness of all political things, and become a party affair. Without quarrelling, prematurely, howev-

er, about questions of this kind, it was sufficiently obvious to all, that much "material aid" might be rendered to the Society, incidentally, if not directly, by the distribution of valuable seeds and plants, and especially by the diffusion of knowledge by printing and circulating agricultural statistics and general information.

And this, after all, is the main point—the *diffusion of knowledge among the masses of the people.* There has been for centuries, enough of agricultural knowledge extant, if generally appreciated and practiced, to change this wilderness of a world into almost a paradise, but that knowledge has been confined to a few—formerly, before the art of printing, necessarily to a *very* few, and always to this day, to a small portion of the community. The reading, thoughtful farmer may obtain this knowledge, and he has obtained it to a great extent, and its effect has been manifest in his success in cultivating his land.

But now, at this time, the majority of the farmers, even of New England, have not access to the knowledge which is printed and published.—Many of them take no agricultural paper, and have a jealousy of all teachings except the *traditions of the elders!*

Now the first object in view, is to overcome prejudice against scientific farming, to make every farmer understand that he has much to learn, and to put into his hands the results of the experience of other men, and to draw out of him, for the benefit of the world, the observations of his *own* experience. This object can in no way be more readily accomplished, than through societies of this kind, and we regard a National Society as indispensable to bind together as *a Union*, the agricultural talent and interest of the whole.

Into such an association, where all parts of the country are interested, all the results of a thousand experiments may be brought together—through it, all the theories of a thousand speculative minds may be tested, and their fallacies exposed, and their benefits made manifest.

The great desideratum is to bring the minds of men in contact, to compare theories and results, to publish to the country whatever valuable conclusions may be attained.

The Constitution of this Society provides for the admission of *Life Members* on payment of twenty-five dollars, and of general members on payment annually of two dollars.

Each member will receive, free of cost, a copy of the journals of proceedings, and of all other matter published by the society.

We trust the farmers of the country will enter into this matter with spirit. It is true that calls are made, constantly, for aid to County and State societies, but no interested member of any society will give this as an excuse for not joining the United States Society, for every such man will feel that he has already received the worth of his money from such sources, and will look upon such payments as the best investment of his funds that can be made.

The *charity that begins at home*, has the approbation of those even whose charity goes never *beyond* home, and the most penurious man is willing to pay his money for what is of more than its value.

We advocate no charity in this instance, but we invite all good citizens to join in a good cause for their own advantage, and for the advantage of their fellow-men, believing that all who, upon either consideration, are induced to render their aid, will find ample reason to be satisfied with the results.

Measures, we are informed, will soon be taken to procure members throughout New England, and we trust New England men will show a New England spirit in the enterprise.

INVENTORY OF NEW HAMPSHIRE.

We copy that portion of it which relates to stock kept in Rockingham County, from the *Exeter News Letter* of Dec. 6, 1852.

The number of horses returned for the present year was 4,889. Of these, Deerfield had the largest number, 368; Derry had 278; Portsmouth had 240; Exeter, the fourth in the list, had 228; Londonderry had 220; and Northwood 212. No other town had over two hundred. Gosport had none and New Castle only 9.

The number of cows, oxen, and other neat stock kept in the county at the time of taking the inventory, was 26,934. Of these Deerfield had the largest number, 1974; next comes Derry, 1300; Candia had 1246; Londonderry, 1200; Nottingham, 1153; Northwood, 1079, no other town had over one thousand. Exeter had 777, Epping 972, Portsmouth 682, Kensington 800, Hampton 842, Hamptonfalls 834. No other town had less than three hundred, except Gosport, which had none, and New Castle 51.

The whole number of sheep in the county was 13,820. Deerfield had 1345; next comes Epping, 954; then Nottingham, 897; Brentwood, 672; Raymond, 670; Stratham, 695; Northwood, 634; Chester, 619. No other town had over five hundred. Exeter had 390.

A Beautiful Art.—Our attention was attracted, a day or two since, by the beautiful appearance of a carved picture frame in the window of Messrs. W. & S. B. Ives' Bookstore. Upon closer inspection and upon inquiry, we learned that what had seemed to us to be carved work, was in reality a very beautiful imitation, manufactured of scraps of leather, and skilfully colored and varnished. The work was done, as we are informed, by a lady of Lynn, Mrs. Moody, who is willing to give instruction in this really beautiful art, if a class can be formed. It is a very pleasant and easy kind of labor, and is peculiarly well adapted for females.—*Salem Observer.*

☞ An exchange calls getting out of bed on the 31st of August, "the last *rose* of summer.

For the New England Farmer.

BULL---EARL OF SEAHAM.

Mr. Editor:—I observe in your May number a portrait of the bull Earl of Seaham that I selected in England, and jointly, with Col. Sherwood, imported. This portrait was taken and engraved for the *International Magazine*, but was by its proprietors condemned, and I had hoped not to see it in print. In two important points it does the bull great injustice; it gives him the coat of a hog, and feet too small to walk with, even to stand upon.

I send you another likeness of the bull, that at least represents a coat of hair, (giving assurance of good touch) and feet upon which he can stand and with which he can walk.

Seaham was shown at the New York State Agricultural Show held at Albany, in 1850, and won the first prize for two year old Short horn Durham bulls, beating Mr. George Vail's bulls Fortune (by his Bates bull imported Wellington) and Eclipse by his prize bull Meteor.

In Oct., 1850, he was shown at the fair of the American Institute in the city of New York and won the first prize for Short horn bulls two years old and upwards.

In September, 1851, Seaham then three years old, won the first prize for Short horn bulls three years old and over, at the Show of the New York State Agricultural Society at Rochester, beating Mr. L. G. Morris' prize bull Lamartine, and a number of others.

Earl of Seaham, is of a distinguished family, known as the Princess Tribe. For style, quality and milk, it is, in my opinion, the best in England or America.

My cow, imported, Princess I., last year at four years old, gave on dry feed with meal for two months, twenty-one to twenty-three quarts of rich milk, and in May and June on grass twenty-three to twenty-six quarts a day; and this spring on hay, turnips and four quarts of meal has given twenty-four quarts per day and made 13 pounds and 9 ounces of butter in one week. My heifer imported Princess IV., this spring on hay, turnips and 4 quarts of meal, at her first calving has given twenty-two quarts of rich milk. Col. Sherwood's cow imported Red Rose, at four year's old, with her second calf, made 60 pounds and 4 ounces of butter in 30 days ending the 15th of June, 1851, and 47 pounds and 11 ounces in August, amid all the droughts of that month. During five months she averaged as much in milk and butter as during these sixty days.

All the cows of this Princess tribe, now imported that have calved, are good milkers, and I know that Mr. Stephenson, their breeder, has not a moderate milker in his herd; they are all good milkers both in quantity and quality.

I add the pedigree of Seaham, that his long-continued high breeding may be seen:

Earl of Seaham, (10,181.) Roan; calved April 21, 1848; bred by John Stephenson, Esq., Wolviston, county of Durham, England; imported 1850, by A. Stevens and J. M. Sherwood; got by Earl of Antrim, (10,174;) dam, Primrose, by Napier, (6238;) grandam, Rose Ann, by Bellerophon, (3119;) great grandam, Rosette, by Belvedere, (1706;) gr. gr. grandam, Red Rose, by Waterloo, (2816;) gr. gr. gr. grandam, Moss Rose, by Baron, (58;) gr. gr. gr. gr. grandam, Angelina, (bred by Sir Henry Vane Tempest,) by Phenomenon, (491;) gr. gr. gr. gr. gr. grandam Anna Boleyne, by Favorite, (252;) gr. gr. gr. gr. gr. grandam, Princess, (bred by Robert Colling,) by Favorite, (252;) gr. gr. gr. gr. gr. gr. gr. grandam, Brighteyes, by Favorite, (252;) gr. gr. gr. gr. gr. gr. gr. gr. grandam, Brighteyes, (bred by Alexander Hall,) by Hubback, (319;) gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, Brighteyes, by Snowdon's Bull, (612;) gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, Beauty, (bred by Thomas Hall,) by Masterman's Bull, (422;) gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, Duchess of Atholl, by Harrison's Bull, (292;) gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, Tripes, (bred by C. Pickering,) by the Studley Bull, (626;) gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, bred by Mr. Stephenson, of Ketton, in 1739. (See 9th vol. Herd Book, pages 65 and 526.)

This tribe had been in possession of Mr. Stephenson, of Ketton, and his father, of Acklam, as far back as 1684, and prior to that in the possession of the Aislabies of Aislabie, and Studley, as early as 1600. The celebrated bull Hubback was of this family, his grandam being bred by Mr. Stephenson, of Ketton, and by him sold to Mr. Hunter, the breeder of Hubback. For seventy years prior to 1765, in which year Mr. Hunter bought Hubback's grandam, Mr. Stephenson, his father and grandfather, had kept no other cattle than those of this tribe.

You mention the deficient milking qualities of Short horns in general. This is true as to some. Yet it has been the result of such treatment as must ever ruin the milking capacity.

Taken as a race, no breed ever equalled the Short horns as milkers in point of quantity, and none ever excelled them in quality, when giving as much in quantity. Milking has always been their characteristic. Many breeders not desiring the milk, have bred their herds for beef only, and have lost this quality, yet that was not the fault of the race. Every prize won for years at the New York Agricultural Society Shows, has been carried off by Short horn cows, never by a Devon or Ayrshire.

I differ with you as to Devons and Ayrshire. All the persons within my knowledge, save one, who have tried the Ayrshires in this country, have abandoned them. Mr. Prentice, of Albany, has bred them for years, and at present does so, solely. He claims for them great excellence in this respect. On the other hand Mr. Colt, of Patterson, who imports from the best sources in Scotland, has abandoned them as indifferent, and he has for years pursued the production of milk with great skill and care. I might add other names to the list of those who have tried and rejected the Ayrshires as worthless. Experience has shown that in America they are miserable feeders (they are so in Scotland) and indifferent milkers. The climate is too hot for them. I am told that Mr. Cushing, of your State, near Boston, has abandoned them, and he imported at large expense and tried them fully and fairly.

I am a breeder of Devons, and an admirer of them, deeming them one of the best races of cattle in the world. I have been an attentive observer of them for twenty-two years, and have seen them in thousands both in England and America.

As a race, they have never had a milking character, and the most of Devons are now worthless or only moderate as milkers. The great mass of those now and formerly to be seen in this country were and are moderate animals in many respects. They had and have thin narrow backs and chines; flat ribs and bad crops, sinking behind the shoulder; short stiff hair, thin on their hides, and no undercoat, readily admitting the rain; hides thick and hard and as a consequence they are bad handlers; bad briskets, narrow and receding, with leathery chops and heavily dewlapped necks; thin plates, with bagging paunchy bellies. If to this

be added, that the mass of Devon cows in this country are and have ever been moderate milkers and late in maturing, I think there can hardly be any thing worse. It is true, that many of these animals, bad in point of form, were good in point of milk. But animals to be good, should be good in everything; they should milk well, they should feed well and should make level and well pointed carcasses of beef.

Now there are Devons that are all that good cattle should be, are milkers, feeders and have abundant substance, just form, light offal, long mossy or furry hair, with thick undercoat, mellow hides, and admirable touch, and of early maturity; although there are such, they are far from numerous.

In 1850 I imported a number of Devons, selecting them from the best herds in Devonshire, England. Among the number is the bull now owned by the Messrs. HURLBUT, of Winchester, Conn. I invite the breeders and admirers of Devon to see him. They will find him what a Devon should be; and he came from a dam, who is as remarkable for milking power, as she and her son are for form, style and substance. They are the reverse of the picture I have drawn above of bad ones. I imported several heifers and two bulls, besides Messrs. Hurlbut's, and I selected them as meeting my requisitions, and in them I can show early maturity, broad backs and chines, round ribs and full crops, clean throats, and broad deep briskets, and straight bellies with level carcasses. My three year old heifers have milked, with first calves, 18 and 19 quarts of milk, and a two year old, 16 quarts. These animals came from the best sources in Devonshire, viz., the Messrs. Quartleys, Davy & Merson.

The Devons are pre-eminently *the* race for all New England, and should fill it everywhere. The *right* ones, weight for weight, can equal any for the pail, for slaughter; and concededly can excel all others for the yoke. But let New England breeders see that they get the proper ones. Possessed of such they can produce as much beef, milk and butter from a given quantity of land, or food, as with any other race of cattle, and on light land more. But to do this, they must change nine-tenths of all the Devons now in the country. I think the spirit is awakened that will ere long accomplish this, and I for one shall rejoice in it. But this will be delayed or defeated if the belief be induced that *now* the Devons are as a race in America either good in carcass, or abundant in milk. They are, as a race, neither, and the sooner this is understood the sooner will improvement commence, and the more rapidly will it progress.

AMBROSE STEVENS.

New York city.

DECEMBER. — "Old Mr. December" has arrived. He has nipped off the days at each end, and stuck the pieces on to the nights, probably by way of revenge on lovely June, for having done the very reverse. We are inclined to think it is a good move with both. The days are so cheerful and pleasant in blooming, leafy, hopeful June, that if we cannot have more of them, it is well to have them made longer by robbing the nights;—and the days are so chilly and cheerless in December, with the flowers all killed, the leaves all fallen and birds all fled, that it is no matter how short they be.—*Maine Farmer.*

COOKING AND DIGESTION.

A mixed diet of bread, meat, and vegetables, is better than any of the three alone; meat satisfies the appetite more completely and for a longer time than either of the other two; and, if a choice must be made between bread and vegetables, the bread should be chosen. Most kinds of game are easy of digestion. Roast beef and mutton are the most easy of digestion of all butcher-meats. It is a fact worth remembering, that roasting and broiling are the modes of cooking meat which best suit the stomach; this is proved by a comparison of the time required for the digestion of different sorts of food. Thus, beef or mutton roasted or broiled, rather underdone, are digested in three hours—

	Hours.
Pork, broiled	3½
Salt pork, broiled	4½
Pork, roasted	5½
Salt beef, cold, boiled	4½
Soft eggs	1 to 3
Hard boiled, or fried eggs	1½
Venison, broiled	1½
Veal, broiled	4
Veal, fried	4½
Heart fried	4
Rice	1
Milk, boiled	2
Bread	3½

Fruit and vegetables require from two to four hours, according to quality and mode of cooking. Potatoes roasted and baked, and raw cabbages, are digested in two hours and a half; but boiled potatoes need another hour, and boiled cabbage with vinegar, four hours and a half.—*Family Economist.*

LYCEUM LECTURE.

We had the pleasure of listening to a lecture from Dr. J. REYNOLDS, of Concord, before the citizens of that town, on Wednesday evening, the 8th inst. His subject was *Vegetable Chemistry.*— He first spoke of the wonderful and beautiful processes going on around us, all acting harmoniously for a common end, and thus proclaiming their common origin. To the careless observer all appears to be a conflict of elements—but the student of nature discovers unity in diversity, beauty in deformity, &c. Uniformity is the great law of nature. *Art*, by varying the circumstances under which the laws of nature are excited, may vary the result, and on this important fact rests the hopes of the farmer. Work, work, is the great law of life. When living beings cease to work, the life that is in them goes out. Place a seed in the earth, and its oxygen goes to work; its rootlets strike into the earth, and its plumule into the air, and these are the sources through which its nutriment is to be derived. The under surface of the leaves, studded with little mouths which stand open to drink up the carbonic acid from the atmosphere, is the source from which the frame of the plant, the woody fibre, is obtained. He spoke of the analogy between the embryo plant and animals, that after arriving at a certain stage of maturity, they are prepared to derive their nutriment from bodies in contact with them; also of the formative process, the most important in vegetables. Nature

never makes mistakes. The blade of wheat never produces a kernel of rye; the pear on a quince stock produces pears. The leaves are the laboratory of nature—they prepare the sap for the various products of vegetation, and perform the office of lungs. Water and ammonia are decomposed in the leaf, and oxygen and nitrogen thus obtained. The mineral kingdom, he said, furnishes nutriment to the vegetable, and the vegetable to the animal. Carbon is the most abundant material used. Carbonic acid when not mixed with a due proportion of air is fatal to animal life; but from this poison is elaborated by the leaf, the very food by which all life is sustained. He then spoke of the abundant supply of carbon in the immense coal beds and in primeval vegetation.

He then briefly spoke of the influence of the solar light. Sunlight is the motor engine by which the vegetable machinery is kept in motion. Oxygen the great analytical power in nature; its affinity for certain substances occasions the most intense and ceaseless activity, of which he gave examples. He then made some general remarks upon the modes of cultivation—soils and plants suited to each—elements needed for rapid development—easiest and cheapest modes of supplying them, and closed with some observations upon a proper education for the farmer.

The lecture was highly interesting, instructive and useful, and among the best we have ever listened to before that Lyceum. We do not hesitate to recommend it to those wanting a lecture for lyceums, farmers' clubs, or any gathering where the practical and useful is preferred before the miserable speculations so frequently uttered in these social gatherings.

FARMING.

If one-half the zeal, energy and expense that blots so many gazettes with low and coarse abuse, setting the whole community by the ears for the vain and paltry purpose of a few demagogues and office seekers, were bestowed on the advancement of agriculture; if the people were half as ambitious to improve and beautify their fields, as they are to settle the affairs of the nation; and half as angry with thistles, thorns and poor fences, as they are with their political opponents, who probably wish as well to the country as they, we should have more productive fields, less complaints of poverty, more ability to be charitable and munificent, and abundantly more good feelings. From Pittsburg to New Orleans the son plows as his father did before him, and the great mass of farmers are as stationary in theory as they are in practice. Nine in ten believe at this moment, that book farming is the mere useless, visionary dreaming of men that know nothing about practical agriculture.

We would tell them that England is the garden of Europe simply because almost every acre of the ground is cultivated scientifically, and on principles which have been brought to the test of the most rigid and exact experiment. We would tell them that New England, of whose soil and climate they are accustomed to think as consigned, by Providence, to sterility and inclemency, is the garden of the United States, only because the industrious and calculating people do not throw away their efforts in the exertion of mere brute strength—but bring, mind, pain, system and experience to bear upon their naturally hard and thankless soul.

On every side the passing traveller sees verdure, grass and orchards in the small and frequent enclosures of imperishable rock, and remarks fertility won from the opposition of the elements and nature. After an absence of ten years, on our return to our country, we were struck with this proud and noble triumph conspicuous over the whole region.

The real benefactors of mankind, as St, Pierre so beautifully said, are those who cause two blades of wheat to mature where one did before. The fields ought to be the morning and evening theme of Americans that love their country. To fertilize and improve his farm, ought to be the main object of the owner of the substantial soil. All national aggrandizement, power and wealth may be traced to agriculture, as its ultimate source. Commerce and manufactures are only subordinate results of this main spring.

We consider agriculture as very subsidiary not only to abundance, industry, comfort and health, but to good morals and ultimately even to religion. We shall always say and sing, "Speed the plow."
—*Rev. T. Flint.*

CHANGE OF TIMBER FROM CLEARING LAND.

There are few things connected with the natural history of trees or plants more surprising or that has occasioned more speculation than the changes that not unfrequently take place in the growth of timber after clearing, from what it was before that operation. So inexplicable is this change in many instances on the commonly received principles of vegetation, that it has been adduced by the believers in the doctrine of spontaneous production as one of the strongest supporters of their system. We think, however, that singular as the phenomena may be, its solution cannot require a supposition so unphilosophical.

In the Southern States, where the timber is principally pine, when that is cleared off, a growth entirely different, and composed of such as was unknown to the place before it, springs up; and this when cut off is not unfrequently succeeded by new varieties, or perhaps by a return to pine. Lands covered with oak and chestnut, or such timber as shoots up from the stumps of cut trees, do not change the timber except in a small degree; it is on those lands covered with timber that requires to be propagated by seeds that this change is most apparent. Everybody must have noticed in what numbers a species of wild cherry will spring up where the forests are cut down, or are propagated by winds, though that particular kind is rarely or never found growing in the unbroken forests.

More than thirty years since, a part of our farm was cleared of its timber, a dense growth of maple, basswood and elm. A small piece of perhaps half an acre was separated from the rest by a narrow ravine after being cultivated three or four years, and part of it planted out as a nursery of fruit trees; it was left to itself. It was soon

covered with young trees, which were suffered to grow unmolested, and there are now on this small spot, white oak, black oak, butternut, white poplar, common willow, walnut, hickory and black cherry, of all varieties, of which not one was growing near at the time it was cleared, and most of them not within three-fourths of a mile. An explanation we leave to others.—*Warren Journal.*

HARVEST HYMN.

BY ALONZO LEWIS.

We thank thee, God of Harvest Home! for what thy love bestows,
For all the varied Providence that from thy bounty flows;
We thank thee for the vernal showers that fertilized the ground;
We praise thee for the genial suns that all man's labor crowned;
We thank thee, God of Harvest Home! for all our wealth of grain;
For the tall wheat whose waving mass like ocean filled the plain.
We thank thee for the fruitful yield of bright and yellow corn;
Whose golden heaps luxuriously our fertile fields adorn.

We thank thee, God of Harvest Home! for all thy fruit so fair,
The apple, with its yellow cheek, the ripe and mellow pear;
The downy peach, the luscious plum, the purple clustered vine,
And the bright show of radiant flowers that in our garden shine.
We thank thee, God of Harvest Home! for more than we may tell;
We thank thee for the fragrant hay that fills our barns so well;
We praise thee for the varied gifts that form our harvest feast,
And the choice store of healthful roots, sweet food for man and beast.

We thank thee, God of Harvest Home! that while in other lands
Pale famine stalks and sweeps away their fever stricken bands,
Our homes are blessed with health and love, with plenty and with joy,
While social and domestic peace yield bliss without alloy.
We thank thee, God of Harvest Home! for all that we partake;
Then let our hearts with gratitude, their hymn of praise awake;
And when our day of labor past, death's harvest hour shall come,
May all our souls, like ripened fruit, be safely garnered home

APPLES AS FOOD FOR STOCK.

The late Payne Wingate, of Hallowell, Maine, made some experiments in feeding pigs with apples compared with potatoes. Both the apples and potatoes were boiled, or rather stewed, separately, and about four quarts of oat and pea meal mixed with each bushel, at the time the cooking was finished—the meal being intimately incorporated with the potatoes and apples while they were hot, and the mass left to ferment, slightly, before it was fed to the pigs.

Two pigs of the same litter, and as near as practicable, of the same weight, were taken; one was fed for a week on a given quantity of the cooked potatoes per day, and the other on the same quantity of apples. At the end of each week the pigs were weighed, and the food was reversed—the pig to which potatoes had been given, was fed with apples, and the one which had received apples, was fed for the next week on potatoes. This course was continued through several weeks—the food of each pig being changed every week. The result was, that the apples proved to be fully equal, or somewhat superior to the potatoes. In this instance the apples were mostly sweet, and they, as well as the potatoes, were nearly in a ripe state.

On another occasion Mr. W. experimented with sweet, compared with sour apples, in various ways. He found that when they were fed *raw* to swine, the sweet apples were preferable—the animals ate them better, as the sour apples seemed to make their teeth sore; but when both were cooked and mixed with meal in the way above described, there was no difference in the gain produced by an equal quantity of each. It should be stated, however, that all the apples used were of palatable kinds, nearly ripe; and that unripe and ill-flavored apples are known to be less relished by stock, as well as less nutritive. It is probable, also, that when sour apples are eaten raw, and in considerable quantities, the animal may take into the stomach too large an amount of acid, which may tend to derange the digestive organs. This objection would be chiefly obviated by cooking, and the saccharine fermentation, by which the pulp loses much of its acid, and becomes nearly sweet. It does not appear from analysis, that the amount of actual nourishment is much greater in sweet than in sour apples.

Mr. Wingate practiced fattening swine for several years, on food composed principally of apples. The animals attained good weights, and the pork was solid and of excellent quality. In other instances, we have known apples fed raw to horses, cows and other stock through the winter, with much advantage. For using in this way sweet apples would probably be best, and they should be such as will keep till spring. They may be stored in a cellar under the barn, or in the bottom of the hay mow—a proper place having been left for that purpose when the hay was put in. They will be more likely to be injured by heating than by freezing. They will seldom freeze in such a situation as is mentioned; and if they should be touched by frost, their nutritive properties will not be much lessened, if they remain in a dark place, and where they will thaw slowly.

A peck of apples a day, fed to a cow, has been found to add more than a quart to the daily quantity of milk, beside greatly increasing its richness, as well as improving the condition of the cow. The effect of apples is equally favorable to other stock. Horses fatten on them, and their coats assume the brilliancy which hardly any other food will give them. For all stock they answer a similar purpose as vegetables, in preventing costiveness, which is likely to ensue from the exclusive use of dry food; and in this way, and by the nutriment they contain, they contribute much to the animal's thrift.

An impression prevails that apples will dry up the milk of a cow. This idea has been imbibed either from the effect produced on a cow by eating a very large quantity of apples at once, by which surfeit and fever were brought on, or from the trial not being properly conducted till the animal had become habituated to the food. The ill effects attributed to apples would have occurred with any other rich food, as any kind of grain, potatoes, or other vegetables.

A fair average product of an acre of orcharding, in good bearing condition, may be estimated at two hundred to three hundred bushels a year; and at this rate, we doubt whether so great an amount of animal nourishment can be obtained from the same extent of land, in proportion to the expense, by any other crop. We should not hesitate, therefore, to recommend the cultivation of apples as food for stock.

THE ROCKINGHAM FAIR.

Pursuant to notice, a meeting was held at the Town Hall in Exeter, for the purpose of forming a County Agricultural Society, on Thursday, the 28th day of October.

The meeting was organized by the choice of HENRY F. FRENCH, Chairman. WM. H. HILLS, Clerk, pro tem.

After some discussion touching the general objects of the meeting, a committee of three was raised to report a Constitution.

After a short adjournment the Committee made their report, and an interesting discussion upon the several articles of the Constitution as reported followed.

The Constitution as finally adopted is as follows:

CONSTITUTION.

1. This Society shall be styled "THE ROCKINGHAM FAIR."

2. Its object is the improvement of Agriculture, Horticulture, and the Mechanic Arts in this County.

3. Its officers shall be a President, four Vice Presidents, a Secretary, Treasurer and three Trustees, and a Collector for each town.

4. The President, Secretary and Trustees shall constitute the *Executive Board*, of which the President shall be Chairman, and the Secretary, Clerk. This Board shall by a major vote manage and control all the affairs of the society, and adopt all such measures to promote its objects as they think proper, subject, however, to the direction of the society, at any regular meeting, and to its by-laws.

5. The President, Secretary, and Trustees, shall be elected by ballot, at the annual meeting. All other officers shall be appointed by the Executive Board, except such as may be elected at the annual meeting, in such manner as the meeting shall direct.

6. The Secretary shall keep a fair record of all the transactions of the society, and of the Executive Board. The Treasurer shall keep a correct account of all money received and expended, and shall give bonds as the Trustees shall direct. Their records shall be, at all times, open to the inspection of any member.

7. The annual meeting shall be held in the Autumn, at such time and place as shall be appointed by the Executive Board.

8. Members shall be admitted, on such terms as shall be, from time to time, prescribed, and the society may assess such members not exceeding one dollar year, each.

9. Any person paying five dollars at one time to the Treasurer, shall be a *life member*, and shall not be liable to assessment for five years.

10. The foregoing articles may be altered, at any annual meeting, by a vote of two-thirds of the members present.

A committee of ten was then raised to report to the meeting in the afternoon a list of officers to be balloted for under the fifth article, when the meeting adjourned to two o'clock, P. M.

At the afternoon session, the last named Committee made their report, and an election of officers took place under the Constitution, and the following gentlemen were with almost perfect unanimity elected for the ensuing year:

HENRY F. FRENCH, of Exeter, *President*.
JOSEPH T. GILMAN, of Exeter, *Secretary*.
JAMES PICKERING, of Newington, } *Vice Presidents.*
JOSIAH BARTLETT, of Stratham, } *Vice Presidents.*
MOSES EATON, Jr., of S. Hampton, } *Vice Presidents.*
DAVID CURRIER, of Derry, } *Vice Presidents.*
WINTHROP H. DUDLEY, of Brentwood, } *Trustees.*
THOMAS J. MELVIN, of Chester, } *Trustees.*
JOHN M. WEARE, of Seabrook, } *Trustees.*

After this organization, the Chairman gave notice that he had received the names of seventeen gentlemen from Exeter, who desired to become Life-members, under the 9th Article of the Constitution, and gave their names. Two other citizens of Exeter added theirs on the spot, when gentlemen of other towns followed the example, until *fifty-three* members had subscribed,—thus raising a fund at once of $265,00.

A suggestion was made that measures be taken forthwith, to raise a fund of $5,000, by the admission of Life Members, to place the Society beyond the chance of failure. The whole matter was left with the Executive Board.

It was voted that the publishers of all papers in the county and also of the *Granite Farmer*, be requested to publish the proceedings of the meeting, and the meeting adjourned without day.

The following is a list of the members who have already joined the Society as life members. The whole number is *eighty-three*.

At a meeting of the Executive Board in the evening, Retire H. Parker, of Exeter, was appointed Treasurer.

Exeter.—J. T. Gilman, H. F. French, Nath'l Gilman, Jeremiah Robinson, Retire H. Parker, Nath'l Gordon, Jos. G. Hoyt, Isaac Flagg, D. W. Gorham, John Hoyt, Orin Head, Daniel Melcher, Wm. P. Moulton, Wm. Conner, Geo. G. Smith, J. W. Odlin, R. F. Goodwin, J. H. Shapley, Amos Tuck, John F. Gould, Sam'l B. Clarke, S. W. Leavitt, A. P. Blake, Abner Merrill, Wm. Wadleigh, Charles D. Towle, Jos. B. Flagg, A. S. Thayer, A. W. Lovering, Charles Conner, Thomas Conner, John P. P. Kelley, E. S. Durgin, Geo. Gardner, Asa Jewell, Wm. B. Morrill, S. W. Dearborn, J. C. Long, John Sullivan, E. H. Valentine, Joseph L. Cilley, John Dodge, C. T. Bunker, Samuel H. Stevens, Timothy Tilton, S. H. Piper, Joshua Getchell, Jacob Carlisle, Jewett Conner, Daniel F. Hayes, Edmund Elliot.

Stratham.—Josiah Bartlett, J. H. Diman, Franklin Clark, J. B. Wiggin, John E. Wiggin, Geo. Wingate.

Kingston.—Gideon Webster, William Webster, J. M. Bartlett.

Danville.—Wm. Hoyt.

South Hampton.—Moses Eaton, Jr.

Newmarket.—B. B. Tuttle.

East Kingston.—James M. Sanborn, R. W. Currier.

Plaistow.—Levi B. Tucker, Wm. H. Hills.

Kensington.—Joseph Brown, Stephen Brown.
Chester.—Thos. J. Melvin, S. F. Learnard.
Derry.—David Currier, Richard Melvin.
Brentwood.—Winthrop H. Dudley, T. S. Robinson, Frederick Robinson.
Hampton Falls.—Geo. H. Dodge, John W. Dodge, Wells W. Healey, John Weare, Jos. H. Weare, Jos Cram.
Hampton.—Robert F. Williams.

For the New England Farmer.

A FARMER'S FIRESIDE TALK—GROWING CORN—HILLING UP.

Now that the hard work is through, the corn in the crib, "the deposits removed" from the barn yard to the old field, and the turf, mulch and scrapings hauled and spread into the cattle yard, we have leisure for a little talk among ourselves; and as I have come over to spend this evening with you, Mr. Brown, by the fireside, I want to talk with you about corn. That, I think, is one of the best crops that I have commonly raised on my poor farm, and I want to get at the best way of working it. I follow the old plan. I work now pretty much as they have worked corn in this neighborhood, as long as I remember. I am one of those, as you know, who havn't thought much of science, in farming business, and havn't believed in the benefits of book farming; but I like to talk with my neighbors and find out whose way is the best. When I was up to the fair, a few days ago, I heard a man, he was a stranger to me, talking some about corn. He had a good deal to say against hilling up and topping, in particular. He talked as near as I can recollect, about in this way.

"One of the great troubles against which the English farmer has to guard, is too much wet.—The climate of England is a very moist one. To prevent injury from this excess of moisture, the English farmer hills up his vegetables, in some cases, or in others, makes a ridge, which serves of course to shed the water, in some measure, and thus preserves the crop from too much excess of wet. Our fathers, when they came from England and made farms in this country, did not know the great difference in the climate, and inconsiderately, no doubt, followed the same course here, that they had there. When, after some trial of the climate, they came to perceive that this was the opposite of that of England, and that here the farmer had to combat the drought, as he had there the wet, they had already become fixed in their mode of cultivation. And you know when a farmer has got fixed, it is easier to get out a loaded wagon that is hub up in the mud, than to unfix him, especially if he is one of the English or Anglo Saxon breed. Our crops here seldom suffer from too much moisture, but they frequently are injured by drought; sometimes wholly destroyed by it. Now there cannot be a question that hilling up aggravates the drought. Hilling or ridging sheds the water, and turns it away from the roots, and when the rain is a light one, it will frequently wholly prevent the roots from feeling it, while if not hilled up, the wet would go to the roots. Now moisture is of as much benefit to the roots as manure is, especially in the early part of the season, before the plant begins to take in moisture by the leaves, which is not till near midsummer. It is not only absolutely essential to the sprouting of the seed, but it furnishes ammonia to the plant in its aftergrowth, and in this it does the same office as the manure."

"Well," says I, "neighbor, I don't know as it is going to make so much difference; but I should'nt like to raise corn without hilling up; and I don't believe it can be done either, so as to come to any thing. Why corn couldn't stand up, unless it was hilled. It grows in such a way, throwing out roots to the side of the stalk, and these roots will be above ground and have nothing to hold to if they are not hilled."

"Have you tried that?" said he.

"No, I have not," said I.

"Well, if you try it, sir," said he, "you will find it to be a mistake. The corn which is raised in the Southern and Western States is about double, or more than double, the weight of that which we raise here. It grows ten to twelve feet high, and the stalk is nearly or quite double in size to ours; and in the West, they raise that kind of corn without hilling, and it stands up well. There are commonly a great many roots bare where they put out from the stalk, but they get hold of the ground, and there is no trouble; and that in a light soil, too.

"It is a bad plan, too," said he, "to cover the roots of anything too deep. The roots must have air. While they are pushing into the ground and drawing nourishment from that, they draw it too, at the same time from the air, and if the roots are covered too deep, they will be smothered, and the growth of the plant checked. I have seen farmers cover three inches, and then hill up five or six. Now it is quite deep enough to cover from one to two inches; and there should be no hilling over this in our climate. The hoeing should be only to kill the weeds and to stir the ground; and when stirred, the ground should be left as flat as possible around the corn, so that the water should not be shed from it, and never more than two inches over the roots. In this climate, dishing would be better than hilling."

He said it was some years since he had raised corn. Since he had lost his wife, and having other business, he had let his farm. He used to raise corn in the old fashioned New England way. But if he ever tried it again, it would be in the way he spoke of.

He had a good deal to say, too, about topping corn. Some of it, I have heard before, and some of it I never heard before. What he said about the ear being nourished by the leaves, from the air, and not by the roots from the ground, seemed to me to be curious. But it would take a considerable time to tell all he said about this; and as I want, after I have heard what you think about his ideas of planting and hilling up, to talk about some other things, some neighborhood matters, I will not now say anything more on corn at present. I should like to know what you think about this hilling up, for it did seem to me to be reasonable that heaping up the ground about corn as I and my neighbors do, must have the effect to turn off the rain from the roots,—and we never have too much rain, that's a fact. We hardly ever get so much rain as the corn wants; and some years it gets pretty well pinched by drought. I want to know what you think of this, and I shall be in

again this week, another evening, and I will then tell you what he said about topping.

Essex, Nov. 30. W. J. A. B.

REMARKS.—Well, I think you got hold of an interesting "stranger up there to the fair," whose notions about corn are very good. Don't fail to call as you propose, for I shall be impatient to talk with you again about these things.

LAYING OUT SURFACES.

A few simple rules are oftentimes convenient to those who are not conversant with surveying operations, and a writer in the *Western Horticultural Review* has communicated to that work some very good ones, some of which we copy, and to which we add a few others.

To lay out an acre in a circle. First fix a centre, and with a rope as a radius, seven rods, three links and three-eighths long, one end attached to the centre, and kept uniformly stretched, the sweep of it at the other end will lay out the acre.

For one quarter of an acre, a rope *three* rods and *fourteen* links will be the right length.

For one-eighth of an acre, a rope *two* rods and *thirteen* links will be enough.

Triangles.—If you wish a triangle to contain just an acre, make each side nineteen rods, five and a half links long.

A triangle whose sides are six rods and twenty links long each, will contain one-eighth of an acre.

To lay out an ellipse or oval.—Set three stakes in a triangular position. Around these stretch a rope. Take away the stake at the apex of the triangle, which will be where the side of the oval is to come—move the stake along against the rope, keeping it tight, and it will trace out the oval.

A square, to contain an acre, or just one hundred and sixty rods, should have each of its sides just twelve rods, ten feet and seven-tenths long.

To draw an oval of a given size.—The long and the short diameter being given—say twenty feet for the shorter, and one hundred for the longer—divide the short diameter into any number of equal parts—say ten—and from each point draw a line parallel to the long diameter; then divide the long diameter into the same number of equal parts, (ten) and from each point draw a line parallel to the short diameter. Then draw a line from point to point where each corresponding line cuts the other, on the outside, and this connecting mark will describe the oval or ellipse required.—*Maine Farmer.*

WINTER LECTURES.—The particular attention of the reader is called to a communication in another column on this important matter. We agree with the writer in all the positions he takes, and should be glad to be instrumental in calling the attention of curators in every town in the State to this subject. There is a foolish notion prevailing, that Lyceums must be supplied by professed lecturers, who, alone, are qualified to amuse or impart instruction. Let the merchant, the mechanic, the farmer or sailor take the platform in turn with those who have, heretofore, almost exclusively occupied the ground, and the world will grow wise quite as fast.

OFFICERS ELECTED.

Of the N. H. STATE AGRICULTURAL SOCIETY for 1852–3:—

President—D. P. P. WOODBURY, Bedford.
Vice Presidents—John H. Steele, Hillsboro' County; A. B. Closson, Grafton; Austin Corbin, Sullivan; David Buffum, Cheshire; Samuel Bean, Belknap; Levi Bartlett, Merrimack; Samuel Bean, Carroll; Joseph Cilley, Rockingham; William Haile, Strafford; John P. Pitman, Coos.
Executive Committee—H. F. French, Exeter; John Wadleigh, Meredith; Thomas H. Leverett, Keene; N. B. Baker, Concord; Wm. Tenney, Hanover.
Secretary—J. S. Walker, Claremont.
Treasurer—Frederick Smyth, Manchester.
Auditors—Daniel Clark, Manchester. Brooks Shattuck, Bedford.

HILLSBORO' AGRICULTURAL SOCIETY, N. H.—At their late annual meeting, this society elected for

President—BROOKS SHATTUCK, Bedford.
Vice Presidents—J. M. Tyler, Pelham; Hiram Munroe, Hillsboro'; Jonathan Russell, Mason; C. E. Potter, Manchester.
Recording Secretary—Moody Hobbs, Pelham.
Corresponding Secretary—A. G. Comings, Mason.
Treasurer—David Stuart, Amherst.

CHELMSFORD ASSOCIATION.—At the annual meeting of the Chelmsford Farmer's and Mechanic's Association, the following persons were elected as its officers, viz.:

President—Dr. J. C. BARTLETT.
Vice President—Capt. Asa Hodgman.
Secretary—E. H. Warren, Esq.
Treasurer—Joseph Reed, Esq.
Executive Committee—Joseph Warren, Jr.; Sewall Parkhurst; Charles T. Bird; Charles Proctor; F. S. Sawyer; E. P. Spalding; David Pelham.

DOMESTICATION OF WILD ANIMALS.

Among the animals over which God has given dominion to man, and which are fitted for domestic uses, there are several on this continent waiting to be subdued, and brought into service. We are glad that public attention is to be directed to this subject. The agricultural portion of the report of the Patent Office for the present year, contains an elaborate article upon it, from the pen of Prof. Spencer F. Baird, of the Smithsonian Institution, and the proposition to publish one hundred thousand copies for distribution having prevailed in Congress, the people will have in their possession the necessary information, and can hardly fail to give it their earnest consideration. The animals, as we understand, which are particularly named, are the moose, the reindeer, the elk, the buffalo, the sheep and goats of the Rocky Mountains, and the antelope. The reindeer, as is well known, is an animal of great speed and endurance, and the moose adds to these qualities immense strength. These animals are found along our northern frontier, especially in Maine, and are so perfectly adapted to the climate and the country, that they may be regarded as indispensable to the full development of the high latitudes of the continent. The reindeer would be of greater service in the British possessions than with us, but the moose might be introduced throughout our northern States with very great advantage. Fully equal to the horse in weight, they are more cheaply fed; their strength is greater, and their speed is fully twice as great. Added to this, they are useful as an article of food. Domesticated, all their native qualities would be improved. They would attain larger size and finer form, as well as increased

strength and speed. Their horns could be removed by the same process which would temper the ferocity of the male. On branch railroads a moose would draw a car with ease at the rate of fifteen to eighteen miles an hour, and on plank roads they might be driven with ease from twelve to fifteen. Over our Western prairies, they would fly as on the wings of the wind. They have been used in the high latitudes of Europe, and the accounts of their fleetness are almost incredible.—Indeed, in one case at least, their use was forbidden by law, because criminals once mounted upon them, were utterly beyond reach of their pursuers. It is believed that even the generation taken wild, can be rendered as docile as other domestic animals. In the more southern latitudes of our country, the elk can be used for similar purposes. The elk is smaller but not less fleet, and though feebler for draft, would be found perfectly fitted to scour the prairies and plains of the southwest.

The buffalo which is disappearing before the march of civilization, is more profitable for beef than the ox, more powerful for draft, and travels at greater speed. The milk of the female yields a larger proportion of cream. The skin is of equal value, and the hair can be woven into coarse fabrics. The process of introducing this animal into use has already commenced. They are domesticated in considerable numbers in Kentucky and Missouri, and can be used in every latitude from our northern to our southern frontier.

The Rocky Mountain sheep furnishes no wool, but is valuable for its mutton, which is regarded as superior to any other which is known. This animal is very large, the best specimens weighing from three hundred to four hundred pounds. Domesticated, its size would be increased, and its quality improved. The antelope is much smaller, and would be valuable for the same use—as an article of food only.

The Rocky Mountain goat whose home is in the clouds, furnishes wool of more excellent quality than the finest cashmere—a fact sufficient of itself to justify every exertion to bring it into use.

All these animals (besides varieties of the deer species, which we have not named) belong to the undeveloped resources of our continent and our country. They wait, as blessings of divine Providence, to be appropriated and used by man. That the suggestions of science will in time be reduced to experiment and success, does not admit of doubt. Attention cannot be called to such a subject in vain. We need an Agricultural Bureau at Washington, and appropriations by the general government to enable it to perform just such services as are here named. Such services are for the common benefit, for the common wealth and comfort, and would command common concurrence. It is time that farmers demanded of the government an interest in their affairs, and that the government should reduce to success experiments which are too large for individual enterprise.—*Watchman and Reflector.*

A Monster Pear.—Mr. Edward Gould has raised in his garden in this city, the present season, some Bartlett pears, which in size go a little beyond any fruit of the kind we ever heard of. One of them measured a foot in circumference, lengthwise, and ten inches transversely, and weighed 11 3-4 ounces. Another weighed 19 1-2 ounces. —*Portland Adv.*

For the New England Farmer.

ON VENTILATION.

Mr. Editor:—I see in a late number you have made some remarks on ventilation. No one that is sane can for a moment doubt the consequences that follow from having their rooms inclosed nearly air tight, which must be the case, after blocking up the fire-place, and with no other means made use of for ventilation. We need not wonder that so many die of consumption. Look at the countenances of the people, especially females, and one must be convinced, that a foul atmosphere is the main cause of their debility. I have been much about large stores in cities and large towns, and 'tis all the same. I find almost all the young men and females have the same sallow and unhealthy countenances. The same evil is in dwelling-houses, whether occupied by rich or poor. I have been in many cooking kitchens at hotels, that are much frequented by the wealthy, and they little dream what a place is used; it is called a kitchen, but from want of ventilation, is often a horrible place, and all from want of knowing how to ventilate. Nothing is more easy than to ventilate rooms, large or small; and nothing is more conducive to health. The present system ruins, without their knowing the cause, the health of thousands of young peopeople.

Very many of these ill-ventilated rooms, are the dwellings of the poor tailor, and dress-maker, and of other sedentary occupations who make the beautiful dresses for the ladies, and the superfine for the gents; and we need not wonder if some virulent disease at times makes its appearance; and when it does take place, we complain, and say it is the will of Providence, forgetting that nature's laws have been violated. Samuel Clark.

April, 1852.

MARKHAM'S FAREWELL TO HUSBANDRY.

We continue below two or three extracts from the old book, *Markham's Farewell to Husbandry*, to which we recently alluded. The part of the work from which we quote now treats of the orchard and garden, and is printed in the old English black letter. The first extract we make is of the "distance of trees," and the second, from the *poetry* of the work, in relation to the honey bee.

DISTANCE OF TREES.

I know not to what end you should provide good ground, well fenced, and plant good sets; and when your trees should come to profit, have all your labours lost, for want of due regard to the distance of placing of your trees. I have seene many trees stand so thicke, that one could not thrive for the throng of his neighbours. If you doe marke it, you shall see the tops of trees rubd off, their sides galled like a galled horses backe, and many trees have more stumps than boughs, and most trees no well thriving, but short, stumpish, and evil thriving boughs: like a corne-field over-feeded, or a towne over-peopled, or a pasture over-laid, which the Gardiner must either let grow, or leave the tree very few boughs to beare fruit. Hence small thrift, galls, wounds, diseases, and short life to the trees: and while they live greene, little, hard, worme-eaten, and evil thriving fruit arise, to the discomfort of the owners.

To prevent which discommoditie, one of the best remedies is, the sufficient and fit distance of trees. Therefore at the setting of your plants you must have such a respea, that the distance of them be such that every tree be not annoiance, but an helpe to his fellowes: for trees (as all other things of the same kinde) should shrowd, and not hurt one another. And assure your selfe that every touch of trees (as well under as above the earthe) is hurtful. Therefore this must be a general rule in this art: That no tree in an Orchard well ordered, nor bough, nor Cyon, drop upon, or touch his fellowes. Let no man thinke this impossible, but looke into eleventh chapter of dressing of trees. If they touch, the winde will cause a forcible rub. Young twigs are tender, if boughs or armes touch and rub, if they are strong, they make great galls. No kinde of touch therefore in trees can be good.

COMMONWEALTH OF BEES.

When I had view'd this Common-wealth of *Bees*,
Obseru'd their *Lines*, their *Art*, and their Degrees:
As; how, beside their painefull *Vulgar ones*,
They haue their *Prince*, their *Captaines*, and their *Drones*:
How they *Agree*; how temp'ratly they *Feed*;
How curiously they *Build*; how chastly *Breed*;
How seriously their *Bus'nesse* they intend;
How stoutly they their *Common-good* defend;
How timely their *Prouisions* are prouided;
How orderly their *Labors* are diuided;
What *Vertues* patterns, and what grounds of *Art*,
What *Pleasures*, and what *Profits* they impart:
When these, with all those other things I minde
Which in this *Booke*, concerning *Bees*, I finde:
Me thinkes, there is not halfe that worth in *Mee*,
Which I haue apprehended in a *Bee*,
And that the *Pismere*, and these *Hony-flies*,
Instruct vs better to Philosophize,
Than all those tedious *Volumes*, which, as yet,
Are leaft vnto vs by meere *Humane*-wit.
For, whereas those but only *Rules* doe giue:
These by *Examples* teach vs how to liue.

For the New England Farmer.

APPLES FOR FATTENING STOCK.

Mr. Editor:—I do not pretend to be much of a farmer, but a kind of Jack at all trades. As there is so much difference of opinion, however, as it regards apples fed out to stock, I will give the result of my experience. I had a cow that was 12 or 13 years old last spring; she had a calf one year ago last April; she has been milked every day since, till the 28th of Nov. last, which was the day but one before I killed her; her time would have been out to calve Feb. 14, 1853. All the extra feed I gave her besides apples, was 7 bushel baskets of what is termed cow corn in the ear; I was 35 days a fattening her, and there was one week in the time that she gained 32 lbs.; she was pronounced by good judges to be as good beef as they had seen this year, I have not eat any better this two years.

Yours, J. N. P.

Gcorgetown, Mass., Dec. 6, 1852.

A Hint.—Many large limbs have fallen from the trees in the woodlot. If you have a spare day before snow falls to cover them, go through your lots and pick up what is worth saving, and which if left till covered with snow would be lost. If you cannot do it yourself, invite your poor neighbor to do it for himself. Better it made his family comfortable in the cold winter approaching, than that it rotted on your land.

POULTRY RAISING.

At a recent meeting of the Concord Farmer's Club, the question being, "Is the raising of poultry profitable?" Mr. James P. Brown said he had entertained the opinion that the raising of poultry could not be made profitable among the farmers in Middlesex county. His sons, however, having a different opinion, a year ago he proposed to sell them all his poultry, and purchase of them what eggs and chickens he wanted for the family, upon the condition that they were to keep an accurate account of expenses, and make a true return to him at the end of the year.

Before coming in to the meeting he had called upon them for a return up to this time, the period including nine months, and the following is their statement:

Had on hand, March 1, 1852, 26 fowls, valued at		$10,00
Cost of keeping, consisting of corn, meal, potatoes and meat	19,65	$29,65
Received for 32 pairs chickens sold	28,03	
For eggs up to Dec. 1	19,31	
Have now 82 fowls worth 33 cents each	27,33	$74,67
Expenses		29,65
Profit in 9 months		$45,02

He had seen from day to day how the fowls had been taken care of, and after reading this statement, had changed his opinion, and now believes that poultry may be profitably raised in Middlesex County, by bestowing upon it the same attention that is given to other farm stock when well taken care of. These fowls were plentifully supplied with such food as is accessible to all who usually keep them—corn, oats, meal, potatoes, and occasionally fresh meat, such as the plucks of sheep, or the flesh of young calves, many of which are killed at the age of three or four days by those who are selling milk.

Mr. Jacob B. Farmer said a few years ago he thought he knew something about fowls, but recently had almost come to the conclusion that his knowledge was not to be relied on. He had often found as much clear profit from a single hen through the winter as from a cow. Had frequently got $1,50 per bushel for the grain fed to them, and had received as high as $2,40 a bushel. They should be kept, he said, in a dry, warm place. During the last year his fowls had been diseased, and he had received no profit from them whatever. When he had made a profit it was from the native breed.

Mr. C. W. Goodnow said he had been thinking of Mr. Brown's profits on a single hen, and that they would be about 500 per cent. on the investment. He thought Mr. B.'s opportunities for keeping fowls very advantageous; his own advantages were not so good, but he thought they afforded a fairer opportunity to get at the actual profits than where they are running on the farm. He had only an acre or two of garden, and was obliged to keep his fowls within somewhat narrower limits than the farmer does his. By careful experiment

he had ascertained that each hen requires *one bushel and a third* of grain in a year, which he thought would not be at a less average cost than $1,33 a year;—then how shall he find his profits? Would she afford him twelve dozen eggs in a year? if so, she would pay cost, but nothing more; in all his experiments, which had been many, he had not been able to derive a profit from them, beyond the keeping of some eight to twelve, which number would provide mostly for themselves while the ground is open.

Mr. SIMON BROWN related some experiences in which he had realized larger profits from the investments made in his poultry than from any other item on his farm.

Dr. J. REYNOLDS said he knew a lad who, five years ago, began to keep poultry. He was the son of a widow. He bought five or six hens, raised chickens, and sold chickens and eggs. He fed largely upon fresh fish. He now has a flock of some fifty hens! has purchased a cow, repaired his little barn, clothed himself, assisted his mother more or less, and is now, from the sale of his milk and the produce of his poultry, quite a thriving young man, accumulating a very pretty capital. Fresh fish is found, near the sea shore, a cheap and excellent food for poultry.

For the New England Farmer.

BIRDS AND INSECTS.

ARE BIRDS USEFUL IN DESTROYING INSECTS, ESPECIALLY CATERPILLARS?

Nobody will deny, that *truth defends itself*, and that it, if hidden for a time, will break forth the more powerfully and shine brightly, illuminating the night of ignorance and error. Still it takes, sometimes, not *years*, but *centuries*, to dispel error, and he who should confide in the hope of an *immediate* acknowledgment of what is true, would be very much disappointed. History teaches but *one single lesson*, *viz:* THAT NOBODY CARES ABOUT ITS LESSONS.

Not long ago, somebody doubted the usefulness of birds in destroying insects; he was briefly answered in this paper. One should think, that even a man who never examined the stomach of a bird belonging to the Finch tribe f. i.—I need not allude to the *insectiverous birds;* their name being sufficient proof—could for a moment be uncertain, with what kind of food they rear their young. *Nothing is needed but eyes to see;* there are, however, blind who *will not see.*

Nature is always and everywhere alike herself. Finches, f. i. are Finches in America, as well as in Europe and Africa. They may differ ever so much as *species*, but they do not differ in their general character. They live on grain and insects in America; they feed on insects and grain all over the globe.

There is a sparrow—Fringilla, now *pyrgita domestica*—so common in Europe, especially in Germany, and in more than one respect so troublesome, that he is persecuted by everybody; and as he was thought to be very injurious to fields and gardens, the different governments made the law, that each male individual of age had annually to deliver a certain number of sparrow heads, varying, in different States, from 6 to 12. After this course had been pursued for many years, people began to complain about the scarcity of fruit. There were sections of the country, where the sparrows had been entirely exterminated. Such parts suffered the most, and, instead of the former abundance, their trees yielded no fruit.

Although I was then very little interested in Natural History, yet this fact arrested my attention, especially as I read in a French journal, a remark of a French naturalist—I believe it was *Cuvier*—that the sparrows reared their young with nothing but insects; and that they were leanest in the season of harvest, and fattest in the spring. This struck me as very curious; for whenever I saw thousands of sparrows, united in one flock, falling upon the corn-fields, I imagined that they were devouring rye, wheat, barley, etc. I concluded to ascertain this by a direct experiment. In the following winter (1824) I procured sixty living sparrows. Having made two enclosures in my study, I put twenty-five sparrows in each, ten I caged. All had plenty of sand, brick-dust, lime, etc. I fed twenty-five of them on different kinds of grain; such as wheat, rye, oats, buck-wheat and the like. *Not one of them lived longer than six weeks;* they all died of consumption of the stomach. Twenty-five of them I fed on grain, boiled meat and meal worms. The ten in the cages I fed wholly on either worms, or boiled eggs or meat. All of them lived *six months* in captivity; they were plump and fat, and were set at liberty in the spring. In the following summer, I took several young sparrows of various ages from their nests, killed them and examined their stomachs. *I never found anything in them but insects and worms;* and having, moreover, convinced myself concerning the condition of the sparrows in the spring, summer and fall, and that, in the summer and fall, their stomachs contained chiefly insects and very few grass seeds, hardly ever grain, I began to write in periodicals and to address the governments directly. As I had a great number of witnesses, all of whom were as much surprised at the unlooked for results of my experiments as myself, I had the good fortune of restoring the poor sparrows to their lost reputation, at least, in that province of the kingdom of Hanover in which I lived. The above mentioned law was abolished, and the sparrows remained unmolested.

My experiments were conclusive. There is but one way to refute them, i. e., to show by experiments that mine were wrong. But such experiments are connected with some trouble, and this trouble is not paid for in cash or good notes of hand. Not long ago I showed on what sea-shores asparagus does *not* grow, and where I found it wild. Since that time I received a new edition of *Lenz's Natural History*, 5 vols., a book which, if any, deserves a translation into the English. Its author asserts that asparagus grows wild in Germany, adding that it is found in sandy places. Supposing now, my statements are wrong or incomplete, nothing is necessary but to show, *on what sea-shores asparagus* grows. To resort to a chemical analysis in order to settle that question, is too curious an advice to be followed. Yet somebody gave it.

CHARLES SIEDHOF.

PREMIUMS AWARDED

AT THE FRAMINGHAM CATTLE SHOW IN SEPTEMBER.

We have not been able to obtain the awards of the several committees till very recently. It is now so late that we publish the substance only, without giving the remarks in full made by them.

The Committee on Plowing with single ox teams award the first premium to Abner Haven, Jr., $3,00; second premium to I. S. Wheeler, 2,00; third to J. Johnson, Jr., 1,00.

The committee remark that "they have felt some embarrassment in coming to an award on account of the use by the competitors of two kinds of plows—the double share and the single share, and they would respectfully recommend that the double shares be considered a separate class of plows, and premiums offered accordingly."

"Your committee beg leave to make honorable mention of the work performed by the *double team* of Wm. Buckminster, Esq., as being of the first class—and although he did not contend for a premium, your committee would have given him a gratuity had we been supplied with funds."

Note.—Premiums were offered for single teams only.

JOHN WENZELL, JAMES FENTON, } Committee.

The Committee on Drawing and Backing report that they award the first premium to Cyrus Woolson, $3,00; second to Col. Wm. Hastings, 2,00; third to John Johnson, Jr., 1,00.

MOSES EDGELL, FRANCIS COOLIDGE, GEORGE BULLARD, } Committee.

The Committee on Plowing with Horse Teams award the first premium to Col. Wm. Hastings, $3,00; second to Buckley Moore, 2,00; third to Harrison Eames, 1,00.

F. A. BILLINGS, H. R. DANIELS, P. B. DAVIS, } Committee.

The Committee on Bulls report that there was but one offered for premium—and they award the second premium of two dollars to Dana Warren.

JAMES BROWN, for the Committee.

The Committee on Heifers report first premium to Col. James Brown, $2,00; second to Joel Edmands, 1,00; third to S. S. Lewis, 1,00.

Note.—Names of the Committee not sent to us.

The Committee on Steers report that but one pair was exhibited to them. This was a pair of twins, by a young lad, Sylvanus Phipps, the son of Joseph Phipps.

JOHN JOHNSON, OBED WINTER, WILLARD HAVEN, } Committee.

The Committee on Calves award the first premium of $2,00 to J. Johnson, Jr.; second to Col. James Brown, 1,00 for heifer calf; and third premium of 1,00 for heifer calf to Obed Winter.

BUCKLEY MOORE, Chairman.

The Committee on Horses award the first premium of $3,00 to Franklin Mason; second of 2,00 to Gilbert Childs; third of 1,00 to John Clark.

In behalf the Committee, JOHN CLARK.

The Committee on Colts award to Josiah Gibbs first premium of $2,00, for three year old colt. To Addison Belknap, the second premium $2,00 for a two year old colt. To Josiah Gibbs the third premium for the best yearling colt, 1.00.

GILBERT J. CHILDS, J. G. BANISTER, NATHL. PULSIFER, } Committee.

The Committee on Spring Pigs award to Ezra Dyer, $2,00; to Abner Haven, Jr., 1,00; to Abiel S. Lewis, 1,00.

JOSEPH FULLER, JOEL EDMANDS, ELIPH. HASTINGS, } Committee.

The Committee on Breeding Sows award the first premium of $2,00 to A. S. Lewis, for his two Suffolk sows. Second to C. K. Woolson, $1,00; and they recommend a gratuity to Dana Warren for three breeding pigs.

J. S. WHEELER, JOSEPH PHIPPS, DANIEL PARMENTER, } Committee.

The Committee on Cheese award to Capt. Adam Hemenway the premium of $2,00.

DEXTER ESTY, HOLLIS HASTINGS, } Committee.

The Committee on Bread award the first premium to Mary E. Cloyes, 14 years old. Second to Miss Moore, daughter of Buckley Moore, 11 years of age. Third to Miss E. S. Phipps, 13 years old. Fourth to Miss Adeline Kilburn, 14 years old.

J. W. BROWN, C. C. ESTY, OTIS HASTINGS, } Committee.

The Committee on White and Brown Bread award the first premium of $1,00 to Mary Sullivan. Second of 75 cents to Mrs. George Eames. Third of 50 cents to Miss Mary Hyde. Fourth of 25 cents to Mrs. Dana Bullard.

S. WHITNEY, S. O. DANIELS, NEWELL CLARK, } Committee.

☞ The attention of the reader is called to the portrait of the beautiful animal in this number, and to the description of two or three of our popular breeds of cattle drawn with a free hand by Mr. AMBROSE STEVENS, of New York. Mr. Stevens has had great experience with stock and has given his opinions in that straightforward and unequivocal manner as to leave no doubt of them on the mind of the reader. We neither endorse or deny what he says, but leave each person to come to his own conclusions. A free, but kind, discussion of the merits of the various breeds of cattle must result in benefit to the farmer.

So far as our *own experience* goes, the best milkers in our stall, including richness and quantity, have been those where the "Short Horn" blood

was prevalent. For the yoke, we have never seen any cattle excel the Devons on the farm of Mr. FRENCH, at Braintree.

TO THE FRIENDS OF AGRICULTURE IN MASSACHUSETTS.

The undersigned, a committee appointed for the purpose by the Massachusetts State Board of Agriculture, beg leave respectfully to call your attention to Public Lectures as a means by which much information may be diffused and interest excited in the community on the subject of agriculture. Such lectures are, at the present time, one of the most powerful instrumentalities for the advancement of any branch of knowledge, or any measure of reform.

Numerous voluntary organizations existing in all parts of the Commonwealth under the name of Lyceums and similar associations, afford easy and available opportunities for presenting the subject of agriculture to the people under the form of popular lectures.

It is felt by those to whom the interests of agriculture in this State are now more particularly entrusted, that these opportunities ought to be improved, and that measures should be taken by those friendly to the object, to bring the subject before their respective Lyceums, and other like clubs or institutions, and thus secure lectures on Agriculture, Horticulture, Pomology, and kindred topics.

A majority of the people in nearly all the towns in this Commonwealth are directly interested in these subjects, and it is believed feel desirous of information in relation to them. It would seem, therefore, that some of the lectures annually given before these various popular societies should be on agriculture, in some of its various departments.

The Committee are aware that it is now late in the year, and that arrangements for lectures for the season have already been generally made, yet they do not on that account feel it less their duty to call attention to the subject, in the hope, that although but few lecturers should be secured for the present winter, early and effective arrangements will be made for the next.

Should lectures of a practical character be wanted, applications may be addressed to the "Secretary of the State Board of Agriculture, Boston," with whom, at the request of the committee, the names of several gentlemen have been left, who will perform the service.

AMASA WALKER,
JOHN W. PROCTOR,
EDWARD HITCHCOCK, } *Committee.*

Office of the State Board of Agriculture,
Boston, Dec. 8, 1852.

☞ Editors favorable to the above object are requested to copy.

MYSTERIOUS CONDUCT OF A DOG.

The editor of the *Green Mountain Freeman*, published at Montpelier, Vt., gives the following item of personal experience:

To the many remarkable anecdotes related of the dog, we have one to add from our own personal experience. When just starting in our profession, we slept for a short time alone in our office, much disliking to do so, because we were occasionally subject to severe fits of the incubus, or night-mare, from which we used to depend on others to arouse us. One day, our door was beset by a small, red, stranger dog, that seemed singularly intent on entering. We drove him away twice; but he as often returned and manifested the same earnest desire to come in. Being somewhat surprised at this, and knowing that no one who could be his master had been there that day, we at length opened the door, and by words and gestures invited him to come in. Joyfully availing himself of the liberty, he entered; and, without seeming to look round for any one, quietly lay down under the table, where he remained until bed-time; when we tried to make him go out. But he absolutely refused, and, being struck with the singularity of the animal's conduct throughout, we concluded to let him remain for the night, and after procuring some food for him, retired to our bed, which was in a small adjoining room, the entrance to which from the office, we always for the sake of better air, left open.

Some time during that night, we were visited by a frightful fit of the nightmare, from which, though perfectly conscious, we probably should never have come out without assistance. At our first groan, the dog bounded to our bedside, and commenced barking. Finding this did no good, he mounted the bed, and barked in our face. Failing in this, also, he stript down the bed clothes, and fell to pawing our chest, more and more furiously, till he tore the skin, which instantly broke the horrid spell; and we arose with a feeling of gratitude for the interposition, as we could never help viewing it, more intense than any we remember to have ever experienced. We would have gladly always kept the dog, but the next morning, when we opened the door, he passed out, and, as if his mission was ended, trotted away, never to be seen by us again.

SOPS IN WINE.

This is the name of a delicate little apple which should be found in every garden; ripens gradually from the first of August to October. The skin is smooth, crimson in the shade, stained and striped with purplish crimson in the sun, and covered with a delicate bloom. Flesh white, with stains of a pinkish hue, firm, crisp, juicy, and of a pleasant sub-acid flavor. It is known under several names. *Sapsavine*, *Shropshire-vine;* by Knoop, *Rode Wyn Apple;* by Kenrick, *Sapson*, and by Ray in 1688, *Sops in Wine.*

In ancient times it appears to have been a custom for those who were betrothed to wear some flower as an external and conspicuous mark of their mutual engagement. Spenser, in his "Shepherd's Calendar," says:—

"Bring coronations and sops in wine
Worn of paramous."

Sops in wine, says Brand, were a species of flowers among the smaller kind of gilliflowers or pinks. How the name came to be applied to apples it is difficult to tell, but not any more so in this case than in that of numerous other varieties.

DURABILITY OF TIMBER.

The piles driven at the Woolwich Dock yards, thirty-seven years since, and prepared by the process of Mr. Kyan, are perfectly sound, while similar piles not so treated have required renewal twice during that time. This Kyanizing of timber is performed by immersing it for a time in a weak solution of corrosive sublimate. Could not the same advantages be availed of when setting posts for fences? Suppose the posts be entered in the ground butt-end up, and a small augur-hole of half an inch in depth in the upper end, in which might be placed a small quantity of corrosive sublimate, and then the hole plugged. Should any moisture be resident in the stick, (and no decay can occur without it,) would not the corrosive sublimate be slowly dissolved and carried through every pore of the wood, and if so, would it not add materially to the durability of the wood? We should like to see this tried, and would like to live long enough to report fully upon its effects.—*Working Farmer.*

CANKER-WORMS.

MALE. FEMALE. EGGS. WORM. PUPA.

Our old friend and correspondent, Dea. Fowler, of Danvers, who is untiring in his attention to the cultivation, and the enemies, of fruits and fruit trees, has sent us a small bottle containing several grubs of the canker worm. He says, in a note, "I think it would be well to call the attention of your readers to the tarring of their trees at this time, as a great many grubs or female canker worms are now running."

In accordance with this timely hint we copy from the 2d vol. of the *Farmer*, page 401, some remarks made by Mr. Fowler in that volume, and which we accompany by engravings of the male and female grubs, the worm, and the insect in its pupa state.

Dear Sir:—I hardly know what to say in regard to the canker-worm. I am inclined to think the old mode of the application of tar around the body of the tree, on strips of cloth, canvass, or gunny-bags, six inches wide, and fastened around the trunk, is as good a mode to prevent the grub from ascending the tree, as any other that has yet been found. My mode has been to use tarred cloth; the tar, when thick, I made thin with oil. I stuff hay, cotton, or sea-weed between the tree and the lower edge of the cloth, to catch the drip of the tar; this serves likewise to tire, perplex, and perhaps entangle the grub, before it gets to the tar on the cloth. I think, if the tar is properly and seasonably applied in the spring, it will prove effectual. But some, on the contrary, think that tar must be applied in autumn, say the first of November. From a close observation of the canker-worm, I am inclined to think but few of the eggs deposited in the autumn are hatched in the spring; as only a few males ascend in the fall and winter, most of the eggs prove barren.

The cloth should be taken from the trees as soon as the grubs are done running, and the tar, should there be any, scraped from the trees.

Yours, S. P. Fowler.

For the New England Farmer.

AGRICULTURE A CHEMICAL ART.

Mr. Editor:—Dr. Justus Liebeg, in his work entitled "Organic Chemistry of Agriculture and Physiology," says—"Carbonic acid, ammonia and water, yield elements for all the organs of plants. The atmosphere and the soil offer the same kind of nourishment to the leaves and roots. The former contains a comparatively inexhaustible supply of carbonic acid and ammonia; the latter, by means of its *humus*, generates constantly fresh carbonic acid, while, during the winter, rain and snow introduce into the soil a quantity of ammonia sufficient for the development of the leaves and blossoms." The air by which the growing plant is surrounded, the soil which is the medium of its roots, the fluid by which its food is dissolved and rendered appropriable by those roots, the decomposable animal and vegetable matters which embody its aliment, and the entire vegetable organism itself—its roots, stalk, branches, leaves, buds, blossoms and fruit, together with its sap or circulating fluid, are chemical compounds. Of these, the common air is perhaps the most simple in its composition, yet in this we find a number of elements, viz: oxygen, nitrogen, hydrogen, carbonic acid, and ammonia, together with certain other principles which are perhaps incidental, but which, no doubt, have their appropriate sphere of action in the great circle of vegetable reproduction and life. All these are of a strictly chemical character, and are characterized by energies and affinities equally ample and sublime. To illustrate this remark, oxygen, or vital air, combines with nitro-

gen in fine proportions of relative weight or measure, besides forming a part of the atmosphere which is the prime sustainer of both animal and vegetable life. It also unites with hydrogen in two proportions—forming, in one instance, water, without which no vegetable can be produced, and with carbon, with which it forms two compounds—carbonic acid, a principle of vast utility in the nutrimental economy of plants, and without which no vegetable substance could be made to grow. Let us, for the sake of greater perspicuity, examine, chemically, the substance of that valuable and important fruit—the apple. We will take, for this purpose, the Tolman Sweeting:—

		Pulp.	*Epidermis.*
Percentage of water		84.75	61.20
Do.	dry matter	15.25	38.80
Do.	ash	0.26	0.72
Do.	ash calcined on dry matter	1.705	1.856

Percentage of water and dry matter.

Percentage of water		81 52
Do.	dry matter	18.48

Composition of the Ash.

	With Carbonic Acid.	*Without Carbonic Acid.*
Carbonic acid	17.62	
Silica	1.43	1.750
Phosphate of iron	1.82	2.227
Phosphoric acid	11.51	14.083
Lime	4.05	4 956
Magnesia	1.46	1.786
Potash	34.34	42.016
Soda	15.77	19.295
Chlorine	1.71	2 092
Sulphuric acid	5.44	6.656
Organic matter thrown down by nitrate of silver	4.20	5.139
	99.35	100.000

One more instance, that of hay, will suffice.

One hundred parts of hay, dried at 212°—116.2 parts dried in air, are found by analysis to contain

Carbon	45.8
Hydrogen	5.0
Oxygen	38 7
Nitrogen	1.5
Ashes	9.0
	100.0
	16.2 water.

The formation of manures is a chemical process, and the action of chemical laws is recognized in every department of husbandry, from the time the seed is buried in the soil, and its starch is transformed into saccharine matter—the primary indication of generative life, till the mature fruit falls, a completed result, perfect in all its developments and parts, to the ground. The history of this science is curious. It was once *Alchemy*, by the practice of which, its deluded professors attempted the attainment of unlimited powers of self-reward. It is traceable to the earlier physicians of Arabia, among whom it first took root, and who consumed their lives in the laborious but vain effort to "fix mercury" which they believed to contain the "germ of all curative influences," and to be the "basis of all other metals." They had recourse to many ingenious experiments to "catch the flying bird of Hermes," and to discover the "Universal Elixir," which was to confer upon the possessor the power of transmuting base metals into gold, of prolonging indefinitely, the period of human existence, and of investing mortals with the beauty and bloom of unfading youth. Such dreams, however, have long since been dispelled, and the science of chemistry turned to purposes of practical usefulness and utility. H. D. W.

HAY—CUBIC FEET IN A TON.

I observe you allow 1,000 cubic feet for a ton of hay, by measure. In Vermont, our hay, according to bulk, may be more weighty. A good portion of it, either in stack or mow, 20 by 20 feet square, one foot thick, will weigh a ton; that is 400 cubic feet. Of our lighter meadow hay 500 feet are allowed for a ton. There is a wide difference in the weight and value of hay in different seasons. This year, the same quality and bulk is much heavier than last, and the increased intrinsic value in the same number of pounds in this year's production.

Our State will produce only about half a crop of hay this season. Grains look well, and the root crops of all kinds never looked better. Potatoes are uncommonly fine, and if free from rot, might be quite low in price. The farmers in the northern part of New York have also planted an unusual quantity of potatoes—from 10 to 100 acres in one field.—S. W. JEWETT, Middlebury, Vt.—*The Plow.*

PROGRESSION.

DAVID T. STEVENS, of Lewiston Falls, Maine, gives notice that he will visit "any or all the towns within the limits of their Agricultural Society, the ensuing winter, and lecture on the subject of Agriculture." That's the true way, friend STEVENS, to arouse the masses to a sense of the importance of their vocation. We have urged this practice for years, but the *helpers* are still few.

Mr. Stevens recently read an Address before the West Lincoln Agricultural Society, which we have perused in the *Farmer and Mechanic*, published at Lewiston Falls, and which abounds in practical suggestions and forcible illustrations. Among the clergy may be found some of the best farmers and gardeners in the country; and in connection with their good examples on the soil, they are performing a noble work with the tongue and pen in their respective parishes, and through the agricultural journals.

PREJUDICE AGAINST FARMING.

[Extracted from W. H. Seward's address at Rutland.]

Nature has left all the human faculties in one sense incomplete, to be perfected by general education and by training for special and distinct pursuits. She has left those faculties not less incomplete and without more adaptation, in the farmer's case than in any other. Her laws are general, inflexible. Brutes only have perfect instincts. Man can be nothing, and indeed can do nothing at all, but by the guidance of cultivated reason. Notwithstanding admitted differences of natural capacity, and of tastes and inclinations, it is nevertheless practically and generally true that success, and even distinction and eminence, in any vocation, is proportioned to the measure of culture, training, industry and perseverance brought into exercise. So he will be the best farmer, and even the best woodsman or well-digger, as he will be the best lawyer, the greatest hero, and the greatest statesman, who shall have studied most widely and profoundly, and shall have labored most carefully and most assiduously.

There is another prejudice even more injurious

than that which I have thus exposed. The farmer's son is averse from the father's calling. He does not intend to pursue it, and is always looking for some gate by which to escape from it. The prejudice is hereditary in the farm-house. The farmer himself is not content with his occupation; nor is the farmer's wife any more so. They regard it as an humble, toilsome, and laborious one; they continually fret about its privations and hardships, and thus they unconsciously raise in their children a disgust towards it. Is not this frequently so? Is there a farmer here who does not desire, not to say seek, to procure for his son a cadet's or a midshipman's warrant, a desk in the village lawyer's office, a chair in the physician's study, or a place behind the counter in the country store, in preference to training him to the labors of the farm? I fear that there is scarcely a farmer's son who would not fly to accept such a position, or a farmer's daughter who would not prefer almost any settlement in town or city, to the domestic cares of the farm-house and the dairy.

Whence is this prejudice? It has come down to us from ages of barbarism. In the savage state, agricultural labor is despised, because bravery in battle and skill in the chase must be encouraged; and so heroism is still requisite for the public defence in the earlier stages of civilization, and the tiller of the soil, therefore, rises slowly from the condition of a villain, a serf, or a slave. Nevertheless, ancient, and almost universal as this prejudice is, I am sure that it is unnatural to mankind, in ripened civilization, such as that to which we have arrived. Of all classes of society we have the least need of hunters; and we employ very few soldiers, while the whole structure of society hinges on the Agricultural interest. A taste, nay a passion for Agriculture is inherent and universal among men. The soldier or the sailor cares little for learning, mechanics or music; but the solace of his weary watchings and his midnight dreams, are recollections of a cottage home. The merchant's anxieties and the lawyer's studies are prosecuted patiently for the ultimate end of graceful repose in a country seat; and lunatics, men and women, are won back to the sway of reason by the indulgence of labor in the harvest field, and the culture of fruits and flowers in the garden of the Asylum.

I know that frivolous persons, in what is called fashionable society, who sleep till noon, still continue to depreciate and despise rural pursuits and pleasures. But what are the opinions of such minds worth? They equally depreciate and despise all labor, all industry, all enterprise and all effort; and they reap their just reward in weariness of themselves, and in the contempt of those who value human talents, not by the depth in which they are buried but by the extent of their employment for the benefit of mankind.

The prejudice, however, must be expelled from the farmer's fireside; and the farmer and his wife must do this themselves. It is as true in this case as is the more practical one which the rustic poet had in view:—

> "The wife too, must husband, as well as the man,
> Or farewell, thy husbandry, do what thou can."

Let them remember that in well constituted and highly advanced society like yours, intellectual cultivation relieves men from labor, but it does not at all exempt them from the practices of industry; and that notwithstanding the current use of the figures of speech, "wearied limbs, sweating brows, hardened sinews, and rough and blackened hands," there is no avocation in our country that rewards so liberally with health, wealth and honor a given application of well directed industry, as does that of the farmer. If he is surpassed by others in other pursuits, it is not because their avocations are preferable to his own, but because, while he has neglected education and training, they took care to secure both.

When these convictions shall have entered the farm-house, its respectability and dignity will be confessed. Its occupants will regard their dwellings and grounds not as irksome scenes of humiliating labor, but as their own permanent home, and the homestead of their children and their posterity. Affections unknown before, and new born emulations, will suggest motives to improvement, embellishment, refinement, with the introduction of useful and elegant studies and arts which will render the paternal roof, as it ought to be, attractive to the young, and the farmer's life harmonious with their tastes, and satisfactory to their ambition. Then the farmer's sons will desire and demand education as liberal as that now chiefly conferred on candidates for professional life, and will subject themselves to discipline, in acquiring the art of Agriculture, as rigorous as that endured by those who apprentice themselves to other vocations.

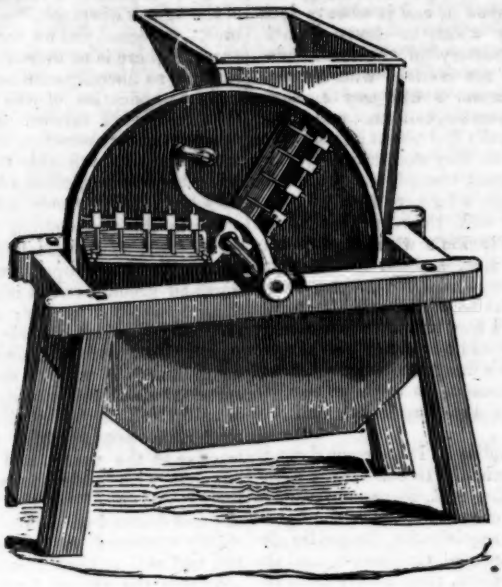
For the New England Farmer.

DISEASED PLUM TREES.

In reply to the inquiries of your correspondent "W. R. C.," I would say, there are various opinions in reference to this malady or disease of the plum tree. I am very well satisfied, from personal observation, that the circulation of the sap has nothing to do with forming the wart, so prevalent in many sections of the country. But a disease probably arising from an insect that works its passage into the very heart and pith of the twig, or branch affected. I observe that this insect ascends upwards, and in order to exterminate its ravages, the branch should be cut at least one foot below the wart, and as much farther as is found necessary, until you come to sound, healthy wood and pith, even if the whole tree goes in consequence. Then burn the cuttings. I am satisfied that if one tree is left to destruction, that the disease is as contagious to the remaining ones as the yellows to a peach orchard. I have many standard plum trees and many in nursery rows, all of which are in a sound, healthy condition; it has always been my practice to watch carefully this disease, and cut freely, sparing no imperfection of wood. I have seen plum trees not fifty rods apart, some clean and round and others literary covered with black warts; therefore no one will presume that *locality* has much to do with the disease. G. B. Slade.

Somerset, Dec., 1852.

Corn Sheller.—The Pennsylvania *Farm Journal*, published at Westchester, says a machine for shelling corn was presented at their late State Fair, that, worked by one horse, had shelled, and was warranted to shell 80 bushels of corn per hour!



VEGETABLE CUTTER.

When hay is selling at $20 to $25 the ton, it becomes the farmer to cast about him and see whether any unusual methods can be practiced to save fodder, or to feed out what he has with more economy. Plants feed more readily upon finely comminuted manures, as they impart their juices more readily, and in this form may be mingled more generally throughout the soil. So cattle receive the nutrient properties of their food with greater ease when divided into small particles by our agency. It then requires less mastication, imparts it properties quickly and leaves the creature opportunity for rumination and rest. Beside this, it is a matter of economy. Corn-stalks divided by the cutting machine and mixed with meal or shorts, will be mostly consumed by the cattle, and will impart considerable nourishment. But roots are more difficult to be eaten without being divided than the grasses or corn-stalks. Given whole, they are a perplexing, laborious and dangerous fodder.

The above engraving represents a machine which will obviate all these difficulties and also prove economical.

The cutting wheel is made of cast iron, faced on one side, through which are inserted three knives like plane-irons. These cut the vegetables into thin slices with great rapidity, and then by cross-knives they are cut into strips of convenient form and size for cattle or sheep to eat, without danger of being choked. The pieces after being cut, lie loosely and anglingly together, and can easily be taken up by the animal. The machine is capable of cutting so rapidly as to leave no objection to it on that account.

For the New England Farmer.

GOOSEBERRIES.

I have cultivated the wild gooseberry for several years, and find that there are a great many varieties of them; some of which have thorns and others do not, and some have fine thorns and very thick, others have large, stout, sharp ones.

Some are good growers and bearers, while others are neither. I have two varieties that I think may be very valuable, one of which I found in this town; the bushes grow large and bear heavily, and almost entirely thornless. The other, I found on the farm occupied by Mr. Fabyan, at the White Mountains. The fruit is large and sweet; the bushes have large thorns, bear abundantly, and are great growers. The bushes of this variety grow larger than I ever saw any other kind—I have seen them six feet high. Yours, &c.,

B. F. CUTTER.

Pelham, N. H., Nov. 6, 1852.

AGRICULTURAL LECTURES.

The attention of the reader is particularly called to a circular in this paper from a committee recently appointed by the "Massachusetts State Board of Agriculture," on the subject of agricultural lectures. Although a large proportion of the population of our State is engaged in agricultural pursuits, we have no knowledge that half a dozen lectures upon the topics in which the farmer is most interested, are delivered in the course of a year. Why is it that this important class and in-

terest has been so long overlooked, leaving the ground to be occupied by a species of fungus literature, half imaginary and half infidel? It is high time there was a change in the matter and style of the lectures, now so frequent among the people, and we therefore thank the State Board of Agriculture for these timely suggestions in relation to this great interest of so large a portion of our citizens.

For the New England Farmer.

IMPORTANT TO THE FARMER.

Mr. Editor:—Of all the plans yet proposed for the advancement of agricultural science among farmers, there has none yet been presented which to us seems so likely to effect the object as the one recently proposed by the State Board of Agriculture, of sending lecturers to address lyceums and farmers' clubs on the subject.

What the present circumstances of the case require, with regard to agricultural science, is, that farmers as a body should be led to see its importance, and the advantages which would result from its application. This, a few may learn from their own practice and observation; a few more may be led to appreciate it, from the facts they find laid down in agricultural publications. But the great mass of those whose chief employment is the cultivation of the soil, do not see, much less read, such publications, because they do not believe in them. What successful practice may have done for them, they will try again, and under like circumstances will probably meet with like success. Should circumstances, however, vary, either in the nature of the soil upon which they operate, or in the capricious fluctuations of the season, both which, to some extent, may be regulated by fixed laws of the farmer's own application, they become nonplussed, and are ready to denounce all observation as the chief of vanities. It is the want of practice and observation that becomes the precursor of failure, and the absence of scientific knowledge that leads men to declaim against it.

But let scientific lectures on agriculture be carried into the lyceum or club room, and you carry them within the reach of all—those who are already wise in their own estimation, and those who sit meekly seeking for wisdom. Let a stranger go to give these lectures and all will be sure to be there, to see how the man looks, what he has to say, and very possibly some will go to *confute all he says*.

No matter, they will all be there, and then is the time, and that is the place, to unfold the subject in all its attractions of thought-inspiring, pleasure-giving, profit-yielding influence. All may not, to be sure, derive equal benefit from these lectures, yet all will gain something—some very much. If the father does not feel particular interest, John or Tommy may get an idea that will sprout and grow wonderfully, and finally become a headful of ideas, flowing out and flying over the land. It may be that half a dozen Johns and Tommies will be there, and each and all, get inoculated with that love of science which only can be satisfied by constant draughts on her deep, pure fountains. If so, the commonwealth will soon have the solid capital (the capital of intellect) necessary to establish and sustain what her wisest and best sons have long wished to see in successful operation,—*an agricultural school*. Produce the scholars, and such a school must, in the order of things, come into existence. Produce the *scholars*, such scholars as have capacity to learn, and a disposition to gratify that capacity, and the existence of such a school will be a healthful and growing one. Let one such class of scholars graduate and scatter to the north and the south, the east and the west, to the hill-top and the valley; and there let their knowledge flow out in living works of improvement, and such a school—more, many such schools would become permanent fixtures in the land.

And then, what a glorious land this of ours, which we now call "the glory of all lands," would be! A land where the plow-boy, instead of "whistling for want of thought," with eye beaming with intelligence and heart expanding under surrounding influences, would be *all thought*, all action. He would learn that the natural world has treasures even beyond his imagination, rich beyond his conception,—beauties that he never dreamed of, wonders that have never been explored, system and order and perfection the most lovely and sublime, all his own, scattering their treasures plenteous as dew-drops in his path, while he is laboring to cause the earth to give seed to the sower for future harvests, and bread for the eater when he fainteth.

We do not think it a visionary idea, in any way, to suppose that a few such lectures as the Board of Agriculture propose, sprinkled over the commonwealth, would be the means of starting one or more agricultural schools. We think it the surest method that can be adopted to bring such schools into speedy existence, for the very nature of such lectures would point to the advantages that such schools would afford, as truly and as fixedly as the needle points to the pole star. It is not until men see and feel the advantages which are likely to result from a specified enterprise, that they will embark in that enterprise. And such lectures must surely be the key which will open to the public mind the advantages of such institutions.

Another advantage would be, the tendency to re-model these lyceums and render them more interesting in their nature, and more important in character.

Many of them, as they now exist in our country towns, can hardly be said to be of any avail, from the fact that they are not managed in a way calculated to insure success. Debating is, to a great extent, the order of their exercises, and the topics introduced are enough to confound wise heads and strong minds. Yet on these subjects, mere school-boys will toil and tug, labor and contend, and one party is sure to come off conqueror—very likely on a subject with whose merits, he is, after all, as ignorant as he is of the physical structure of the most distant planet. It has hitherto been an objection to these institutions that the aspirants have reached too far, and grasped at too much, and hence, have failed of securing any thing substantial. If they will familiarize themselves with common topics, which every day present themselves for investigation, until the mind becomes familiar with them, they will increase in knowledge faster, and of course become more fit for more far off things and those requiring deeper research.

These lectures will have a tendency to turn the channel in the course of proceeding, and call the

mind in from its wanderings on the distant and unavailing, to the home-born and practical things, which, more than all others, demand the attention of men.

We see still other benefits arising from this course of sending forth lecturers on agricultural science, of which we name one more and close.

It is an old maxim, that like produces like, and upon this principle, we can see no objection to the belief that in every lyceum or club, to which the board shall send a lecturer, one, two, three, perhaps more, young men will set themselves to work in earnest to become lecturers in their turn, and thus a regular succession or course be given during the continuance of the meetings. Don't cringe, young man, at the idea, and say you *can't* do it. Others, whose capacities were not a whit superior to yours, have done it, and a young American farmer, especially a Yankee farmer, ought to blush if the idea crosses his mind that he cannot do what others, under no more favorable circumstances, have done. Young men! supposing you try. What if you do take some of the natural sciences (they all belong to the farmer) that you are not familiar with, and as you study, with nature for your teacher, bring the result of your researches and lay them before your fellows. Thus you may learn, and by learning, become a teacher, a lecturer. And your success may encourage others to adopt the same course—beneficial to themselves, encouraging and salutary to others. Young men! Again we say *try*. The leisure of winter, the beauties and availability of science, the culture of the intellect, the dignity of your nature, everything, all things invite to it. Try it, and in due time a success, cheering and honorable, will be sure to crown your labor. W. B.

Elmwood, Dec. 20, 1852.

PIG RAISING IN MISSISSIPPI.

Some of our Suffolk pigs have got out into Mississippi, and as they seem to have met with a kind reception and find themselves in *pretty tall feed*, the following letter, from a correspondent to whom we had sent several pigs, describing the manner in which they are turned to grass there, will amuse by the contrast which it affords between our mode of preparing the porkers and theirs.

On my way home I found the pigs, and must express my thanks for your prompt attentions; the sow is a treasure. I have bought many hogs, and have been feeding them, man and boy, some 30 to 35 years, and I never yet saw a hog which I think will suit this country like this. Two planting friends came here to-day to see them, and both of them think as I say. The boar is good enough, but not so fine in his points. I have now under my immediate care 11 young sows and a boar, nearly as old as the one you sent, and though good hogs, they don't look at all well now by the side of yours. Many of you ice-bound folks if at my hog-house, would be induced to envy even my hogs one thing—sweet potatoes. I am cooking about 20 bushels daily, and such potatoes as you buy by the pound. I have 72 hogs up fatting, fed with boiled meal, hasty pudding, with pumpkins, and with boiled potatoes and meal, food changed. I cook 3 bushels of meal at a time, and then about 10 bushels of potatoes, giving hogs a feed of raw potatoes, and a little raw corn, merely to get them not to tire on cooked food. I think I will kill some 25 head which will run from 175 to 275—these being even larger than is always safe in this latitude. I have now growing as a pasture for hogs 10 acres in clover, oats and barley, intending to turn my brood sows and pigs thereon, say January, which I suppose will keep them until oats are ripe, about June 10. To-morrow I turn my young sows and hogs into a 10 acre potato patch, from which we are now digging. In the same field, I have about 15 acres of oats, up well, about 1 acre in clover, sown last December and now several inches high; this pasture will keep them near 2 months.

I suppose you know not our winter oat; we can thus have a pasture all year. I also sow barley, but rye will not do well. After trying it many years, even sowing down 20 to 50 or 70 acres in the fall, for pasture, I find I have to buy seed about every 3d year, as it seems to almost run out. My plan is, sow on cotton or corn land, without the plow, graze all winter and plow-in, in the spring—reserving enough for seed. This spring I turned under over 80 acres. I had some 20 acres sown down with oats and barley mixed, for hog feed principally, and will continue until I have sown 110 acres—intending to plow all under next spring, except perhaps 20 acres.

I am, dear sir, yours with respect,

M. W. PHILLIPS.

For the New England Farmer.

FARM HOUSES.

MR. EDITOR:—Being about to build a farm house, I have concluded to build of strips, or timber, sawed 4 inches wide and 1½ inches thick, fastened together by nailing from one piece to another, and carrying up all the walls and partition together; the walls to be 1½ story high and plastering on the inside of the walls for a finish. I wish to inquire of you, or some of your subscribers, if the outside could be plastered or finished with concrete or hydraulic cement, and then painted and penciled in imitation of granite, so as to be durable. If so, how to be put on, whether to put on a coat of plaster first or not. Plastering on the outside of buildings is generally not durable; but I should think that concrete might be.

An answer to the above inquiry will be thankfully received by a subscriber. E. CAMP.

Chelsea, Vt., Dec. 14, 1852.

REMARKS.—Some of our readers undoubtedly possess the required knowledge, and we hope will communicate it.

POTASH WATER.

The editor of the *Farmer and Planter*, published at Pendleton, S. C., in cautioning people to use all alkalies with great care when applied to fruit trees, says; "Two springs since we killed some young trees by applying too liberally a solution of one pound of pearlash and one pint of soft soap in three gallons of water. A very dry spell followed the application, and hence not being washed off, the caustic liquid turned the bark of several trees quite yellow, and much injured those that escaped."

For the New England Farmer.

STATE BOARD OF AGRICULTURE.

EDITOR OF THE N. E. FARMER:—Gentlemen—As your paper has noted with more distinctness, than any other, the action of the Massachusetts Board of Agriculture; and as the important question of selecting a permanent Secretary of the Board, remains to be considered; I beg leave to give you a few brief minutes of a conversation that I had with an intelligent friend to the cause as to the qualifications demanded in the office.

He remarked, that the person selected should have much knowledge of the details of a farmer's life, in order to secure the confidence and good will of the farmers themselves. He should be a scientific agriculturist, to some extent, at least, in order to raise and elevate the farming community; not by any parade of science, which would soon bring him into contempt; but by combining and speaking intelligently of the vast amount of facts, which would naturally come to his knowledge.

He should be easy and approachable in his manners. He ought to possess great facility, both in writing and speaking, to meet the demand of an extensive correspondence, and to respond to the numerous societies now coming into being, in which opportunities for doing good are constantly afforded. He ought to be able to act as a mediator to conciliate the prejudices which still exist to some extent, in the minds of the farmers in relation to their more wealthy neighbors; and in the minds of men of wealth, in relation to the operative farmers.

He should be willing to devote himself, body and mind, assiduously to the work; and divest himself entirely of all the *obnoxious isms* of the day—either in politics or religion. The question is, where can such a man be found? If a young man is to be selected, he must have time for preparation, time to visit Europe,* and other States in our own country, before he enters upon the duties of the office. In the opinion of this gentleman, it would be more creditable to the State to select such a man and give him this privilege; than to attempt to mould one into form who has not now these qualifications; and is too far gone to acquire them. If these suggestions shall be deemed by you pertinent to the season of the New Year, they are at your service.

January 1, 1853.

*If I do not mistake, the late Prof. Norton of Yale College was selected and sent abroad for qualification. Several of the most eminent professors in our colleges have been thus chosen. Such is the state of society among us, and such are the limited means of most young men, that every one feels it an incumbent duty to prepare for some definite purpose. As this is a new object, it is not to be expected that men will be found *ready made*. To be sure, President Hitchcock was thought to be such a man. It is ever to be regretted, that he did not accept the office,—at least, until some one could be found, "worthy and well qualified."

TO ADVERTISERS.

It will be seen by a paragraph in another column that we have distributed, during the year 1852, more than *six hundred thousand copies of the New England Farmer*. This fact will show that as *an advertising medium for farms, stock, implements, or any of the wants of the farmer or gardener, or for those seeking agricultural employment*, it offers advantages unsurpassed by any other medium in the country. For terms see advertising columns.

SPLENDID FRUIT.

We have received from Mr. G. W. LAKE, of Topsfield, a box of the most perfectly shaped and beautiful *Northern Spy apples* that we ever saw. Mr. LAKE will please accept our hearty thanks for producing such valuable fruit. We also have before us a box of the same apples sent us from Rochester, N. Y. These specimens, one grown where the apple originated in western New York, and the other in the cold New England climate, will satisfy all, we think, that the Northern Spy may be successfully raised here. Mr. Lake's are larger, fairer, and much higher colored than the western apples.

The Northern Spy keeps better than the Baldwin, and its flavor is equally as good.

Will Mr. Lake inform us whether these apples grew from scions set in old trees, or from budded or grafted nursery trees, and what his opinion is as to its bearing properties, hardiness, &c.

For the New England Farmer.

CULTURE OF INDIAN CORN.

Often have we heard the remark made by experienced practical farmers, that they did not believe in the growing of one hundred bushels of sound Indian corn, upon an acre of land, when fairly measured. And sometimes we have been more than half inclined to give heed to these assertions in relation to our Massachusetts land. Because we have often grown corn on land of superior quality, highly manured, with best of care, and not raised so much as one hundred bushels to the acre. In fact, we do not remember to have seen this amount of crop, when fairly dried and measured. Our attention is called to this fact, by the extraordinary crops reported the present season from the county of Plymouth, where the land is not superior to that of other counties of the State. The supervisor reports the following crops:

Calvin Leavitt	122 10-85	bushels.
George Wood	103 10-85	"
Richard Sampson	96 40-85	"
Martin Leonard	94 70-85	"
Philander Wood	92 80-85	"
William Wood	92 60-85	"

Here are six acres, averaging more than one hundred bushels each, "according to the measurement," if our computation is right. That the gentlemen, who viewed these crops, reported truly according to their knowledge, there is no reason to question;—but that they have the same rule of measurement, as is adopted in Suffolk, Middlesex and Essex, we should like to be fully advised. We have seen the fields of corn, when growing in Plymouth county, and thought they did not promise more than we have met elsewhere. But we are free to say, that we do not believe there is any other county in the commonwealth where six acres of corn will be found to have yielded over six hundred bushels the last season. If there be any variance in the rule of measurement; this is a fair subject to be examined and made uniform by the Board of Agriculture.

P.

Dec. 13, 1852.

THE HYDRAULIC RAM.

The hydraulic ram is a simple mechanical apparatus, constructed upon philosophical principles, and is used very effectively in raising a portion of the water from a spring or running brook above the level of its fountain head. The following description, it is believed, will be easily understood. Suppose a water pipe is laid along down the course of the stream through which the water is required to pass. The lower end of the pipe is closed, and near that extremity is an orifice on the upper side which is opened and closed on the inside by a puppet valve shaped something like an inverted barrel bung. There is also another similar orifice and valve opening outward from the main pipe, and into an air vessel. Now let both valves be closed. As there is then no means of escape for the water in the pipe leading from the spring, it is brought to a state of rest. The valve opening inward is loaded, so that its gravity is greater than the pressure of the water at rest in the pipe; it consequently falls into the pipe, leaving the orifice open, through which the water immediately begins to rush with increasing velocity, until its momentum becomes such as to push up the valve to its place in the orifice. The momentum of the water suddenly stopped in its course, is such as to lift up the other valve opening outward into the air vessel, through which the water rushes, compressing the air into a smaller compass, until the re-action of the air is in equilibrium with the action of the water, when the valve No. 2 falls back to its place and prevents the water in the air vessel going back again into the main pipe. The water in the main pipe then having no escape, is again brought to rest, whereupon valve No. 1 falls down again by its own weight, and the process is again repeated. From the air vessel a discharging pipe leads off to the upper story of a house, or any other place where the water is wanted, to which point it is driven by the elasticity of the compressed air in the vessel. Of course the amount of water raised, compared to the whole, will be in inverse ratio to the elevation of the discharging point above the fountain-head. The momentum of the blow forcing the water into the air vessel when the valve closes, was well illustrated at the time the fountain was first put in action on Boston Common, where, it will be recollected, the momentum of the water was so great at the sudden stoppage of the jet, as to burst the pipes and deluge the Common.—*Journal.*

For the New England Farmer.

WHITE CLOVER.

MR. EDITOR:—Will you have the goodness to state through your paper, your opinion of sowing *white clover seed* on our old pastures, where they are smooth and can be harrowed, in order to revive them after the severe drought of summer, or being killed by the severe cold of winter. What is the price of the above-named seed?

ZENAS H. UPHAM.

Windham, Vt., Dec. 14, 1852.

REMARKS.—Will our associate, MR. HOLBROOK, reply to these inquiries?

☞ Georgia flour, of superior quality, is becoming an article of merchandise in Charleston, S. C.

Ladies' Department.

THOUGHTS AND DOINGS OF A HOUSEKEEPER.

BY FRANCES D. GAGE.

Hi! ho! hum! I suppose I must get up; if I don't Biddy won't get that wash-fire going in season. But O, what hard work it is now-a-days to get up. I am old and stiff. Well, well, I'm not so young as I was twenty years ago; but what of that? I hope my years have been years of service, and my elasticity has not gone for evil. How beautifully that robin sings upon the peach-tree; poor fellow! it is cold this morning, and the snow lies upon his perch; but his note is as gay and cheery as in the balmy spring morning of last week. The birds never grumble or make discordant notes, and they never fail to shake off their drowsy slumbers with the first beams of sunshine.

Thank thee, dear bird of mine, for thy melodious hint, that it is time to get up; so away with morning reveries.

Ha! ha! Ponto; always ahead of me; good fellow! And I stooped down and patted his coal-black head, and he frisked his joy around me as if we had been separated for a year, instead of only one night-watch. Down, Ponto, down! Let me tie my shoes and go to my work.

"Well, Biddy, have you got the wash-fire started in the back kitchen?"

"I have, ma'am."

"That's right. You did not get home last night?"

"No, ma'am; it was too dark intirely to be wandering up the brae, my love, and so I was saying that niver a bit you'd care if I tarried below, barring I was home in season in the morning for the work."

Ha, Biddy, that crimson glow upon thy young cheek tells strange tales. It was not the climbing the brae in the dark, all alone, that kept you down at Paddy Evan's. Some loving Dennis from thy own green isle, has tempted thee, and thy eyes are dim with the late night-watch, and the tremulous sigh breaks up from thy heart. Thou art human, Biddy, and it is human to love: and maids in the kitchen have hearts as softly impressible as maids in the parlors, and as pure, too, for aught I know. Biddy did not hear my thoughts.

"Boil the praties with the skins on, ma'am?"

"Certainly, child; I do not think they are ever so nice and sweet as when boiled with the skins on. Wash them nicely, and cut out carefully all the defective parts, and boil them in clear water; but be sure, Biddy, not to let them boil too long—turn off the water as soon as you can put a fork through them easily."

"And if the young gintlemen are not ready for them, then what'll I do?"

"Let them set in the kettle, on the top of the stove, with the lid tightly closed over them; it will not hurt them much to stand a few minutes."

The cherry-cheeked maiden went her way as if she had learned something new—and may be she had, for though the boiling of a potato seems to be a very simple thing, it's not half the girls, or women either, that take pains to do it right.

But I declare those boys are not up yet.

"Will!"

"Ma'am!"

"Come down! it's time you was up. Wake,

John, and Henry and George. Come, now; don't go to sleep again."

"*We will!*"

Pshaw! the fellow is so sleepy he does not know whether he is saying yes or no. I used to be just so myself, and I never go to the door to call my own children, but I think of my own dear mother that is gone. My mother!—how often I think of her! When I sweep, when I wash dishes, make bread—even when I turn over the slice of meat in the dish—I think of her and her gentle love, and patient teachings to her wayward child. I, too, must strive to be patient.

"Biddy, Biddy! it's time the meal was over. There, you may take hold of the washing now. I will get the breakfast on the table and attend to these little matters, and give you a helping hand, by-and-bye."

"And thanks to ye," answered the cherry-lip, "it's not often the likes of ye goes into the wash-tub."

Poor thing! she thinks that her fate is harder than mine, though I have two cares to her one—but how thankful I am that I know how to get up in the morning and get breakfast—know how to do it myself, and know when it is done right. It is a glorious thing to feel independent—to know that my happiness and comfort, and that of my husband and children, is not entirely in the power of a Biddy, and that if she refuses to butter the toast, or clear the coffee, I can do it myself, and thus save the murmuring and discontent of the household in spite of her. Only think of it, all ye who curl up your lip at the *insignificance* of a housekeeper. Insignificance indeed! Here are fifteen souls under this roof. Suppose Biddy had the washing all to do, and the breakfast to get, too. Biddy would be in a hurry—feel impatient—vexed, perhaps—that she alone was the busy one. The coffee would not be cleared, the pork badly cooked, the potatoes spoiled, &c. Then husband and sons are disappointed, out of humor; stomachs out of gear, and tempers in unison; and they go away to the workshop or office, speak harshly to neighbors, crusty to customers; grow nervous, spoil a job, get into a fret and come home to dinner in a fever; look coldly on wife, spurn the baby, and grieve all hearts, all because wife or daughter could not get up early and help Biddy get the breakfast. I'm glad the robin woke me; glad I know how to work.

"Why, girls, girls, you are up too late; bless you! you don't know how much you lose by indulging this last half-hour in bed. You must get up early if you would have a full measure of beauty—bright eyes and rosy cheeks. I was just thinking how happy getting up in good season and looking to family comforts, will make us all. Only think, Minnie, dear, how nice to have everything right when we all set down to our morning meal—coffee clear, not a biscuit too brown, steak in order, every plate, knife and fork in its place; smiling faces, grateful hearts, and pleasant mirth, not a complaint, not a murmur, and all go away with the consciousness, sitting like a singing bird among the fresh green leaves of family affection, warbling a sweet melody, that they are loved and cared for. O! if there is a thought that will make a man cheerful, kind, generous, and honest, it is to know that he has a tidy, careful, industrious wife and children at home. If such a man can be loved—Minnie, take down the toasting fork, dear, and toast your pa a slice of bread—never mind the boys, they are young and can eat bread without toasting. Always think of your father, child; look to his comfort morning, noon and night, that the blessing of his old age may fall upon you. Nettie, love—Ah, ha!—here is my baby—'No!'—Yes you are, if six years have curled your little pate—come, kiss me now; pretty big to kiss, ain't you? There, let sister Nettie wash you while mamma takes up the breakfast. Tommy, get the chairs round the table—call the family."

Mechanics' Department, Arts, &c.

An Extraordinary Lamp.—Among the list of patents is one taken out by Mr. E. Whele, for a candle lamp of very novel character. The lamp has a dial or clock face, and, as the candle burns, the hands mark the hours and minutes correctly, and a hammer strikes the time. As a chamber light for a sick room, it marks the time, and can be set to strike at any given periods, when the patient requires attention. As a night-light it marks the time on a transparent dial, and rings an alarum at any stated period, and in ten minutes afterwards extingnishes the candle, or will continue to strike every second until the party gets out of bed and stops it; and, if a very heavy sleeper requires to be roused, it will fire off a percussion cap. As a table lamp it marks the time and strikes the hours, and has a regulator and index, by which may be ascertained the amount of light and economy of consumption of the various makers. And all this is effected with very little machinery, which is of the most simple kind.—*Foreign paper.*

Marbleized Iron.—The use of iron, in its application to building purposes, seems to be daily extending; its durability of ornament for architectural adornment, without much increasing the cost, recommends it above all other materials. A new application of it has just been made by the New York Marbled Iron Works, in the manufacture of Marbleized Iron, which has all the beauty and variety of colors that marble itself exhibits. The iron appears to be enameled; and the choicest kinds of marble for Mantels, Columns and Table Tops are imitated so closely, that the ordinary eye cannot detect the difference. The great advantages of this article are its *cheapness*—it is produced at about one-third the cost of marble, and in various shapes and forms, according to the taste of the purchaser; its durability and capability of resisting a greater degree of heat. Neither acids nor oils affect it, in which respect it has a decided advantage over marble.

The beauty and utility of this manufactured article will make it a valuable and important substitute for marble.—*Boston Journal.*

☞ The caloric ship is to go into dock at New York this week, for coppering, and as soon as that job is finished, will make her engineer's trial trip. Her engines have driven her wheels all day at a speed of nearly 14 miles per hour.

☞ Every time you avoid doing that which is wrong, you increase your inclination to do that which is right.

Boy's Department.

WINTER SPORTS.

The summer is ended, the autumn is gone,
And winter, stern winter, is fast coming on—
We see him advancing, his step is not slow,
His cap and his mantle are covered with snow;
His locks and his beard are white with the frost,
And forth from his nostrils the flakes are tossed;
He storms, and he blusters, and makes us to quail,
And flee from his presence when in such a gale.
Yet the storm will blow over, go down with the sun,
And then comes the season for pleasure and fun.
Though his head is so hoary and visage so grim,
There's a smile on his lip, and his eye is not dim;
The boys they all greet him with frolicsome joy,
With a toss of the cap, and a "Welcome, old boy!
Our sleighs are all ready, our skates we will don,
And cut up our capers when the ice we are on."
And the lads and the lasses for sleigh-rides inclined,
With their hoods and mufflers and *beaux* to their mind,
They huddle together in an omnibus sleigh,
By the light of the moon they are riding away—
The merry bells ringing, while story and song,
With clear ringing laughter, come floating along.
The stars they look down from their home in the sky,
And winter, stern winter, just twinkles his eye.
We enter our dwelling—what comfort is here—
The coal burning brightly our spirits to cheer;
The table well spread, with plenty 'tis crowned,
And those that we love, they cluster around.
Our Father in Heaven, bless basket and store,
And give us a heart to remember the poor—
While we from thy bounty such blessings receive,
O, teach us to feel 'tis more blessed to give.

Poughkeepsie Telegraph.

THE YOUNG TRAVELLER.

Henry was travelling alone. He had left his parents and home in New York, and was on his way to "the far west." It was no small matter for a boy of fifteen to take such a journey, with no one to direct and advise him. But he carried with him as a sacred treasure, the counsels of his pious parents, and his religious principles. "When I paid my fare on the boat," he wrote to his mother, "the captain and I could not make the change; and we arranged it so that I owed him ten cents. In trying to get change, I went to a man who asked what I wanted with ten cents. I replied, 'To pay the captain a debt.' 'Pshaw!' said he, 'I wouldn't pay—never pay a debt, if you can help it. It's bad policy.' I told him I thought it right to be honest; and besides, I had no idea I should in the end be ten cents poorer for paying. I soon got the change and paid the captain.

"It turned out that *ten cents paid saved me six dollars and sixty cents.* When in Albany, about twenty minutes before the departure of the train for Buffalo, I recollected that though I paid to Buffalo, the captain of the boat had given me no ticket beyond Albany. I told the gentleman who gave me the change, and he accompanied me back to the boat. The captain having heard the circumstances, asked if I was the boy that paid him the ten cents. I replied, 'Yes.' 'Well,' said he, 'here is a ticket.' I saw that 'honesty is the best policy,' and felt the value of my father's counsels, and the great kindness of God in giving me such parents."—*American Messenger.*

Advertising Department.

☞ A limited number of advertisements of an appropriate character will be inserted in the monthly *Farmer* at the following

RATES.

For one square of 15 lines, one insertion.....$1,00
For each subsequent insertion.....,50

The above rates will be charged for all advertisements, whether longer or shorter.

Pure Black Spanish Fowls.

A few pairs choice Black Spanish Fowls, raised from stock imported this season. For sale by THOMAS THACHER, Jr., at the Fulton Iron Foundry, South Boston.
Oct. 16, 1852. 3m*3

AGRICULTURAL

WAREHOUSE AND SEED STORE,

QUINCY HALL, OVER THE MARKET, BOSTON.

THE Proprietors having recently enlarged their Warehouse, and increased their works at Worcester, would respectfully invite the attention of Planters and Dealers in AGRICULTURAL & HORTICULTURAL IMPLEMENTS, GARDEN and FIELD SEEDS, &c., to their stock, comprising the largest and best assortment to be found in the United States, which are offered at low prices.

Of PLOUGHS—we have the greatest variety of kinds and sizes.

Improved Sod Ploughs, for flat furrows—improved Scotch Ploughs for lapped furrows—improved Stubble Ploughs, which are especially adapted to deep tillage, or varying from 6 to 12 inches in depth.

Self-sharpening, Hill Side, Sub-soil, Double Mould, Corn, Cotton and Rice Ploughs.

Cylinder Hay Cutters, Smith's Patent Lever Gate, and others. Patent Corn Shellers, with and without Separators. Seed Sowers, of various sizes and prices. Batchelder's patent Corn Planter, improved. Fanning Mills of various sizes, Horse Powers, Threshing Machines, thermometer Churns, Robbins' patent Centrifugal Churn, Cylinder Churn, Dash Churn, Corn Planters, together with almost every article wanted on the Plantation, Farm or Garden.

Illustrated Catalogues sent gratis on application, post paid.
RUGGLES, NOURSE, MASON & CO.
Boston and Worcester, Mass., Jan. 1, 1852 tf

Choice Fowls.

The subscriber offers for sale a few pairs of each of the following breeds of Domestic Fowls, viz: White and Buff Shanghaes, Gold and Silver Spangled Polands, Bolton Gray and Black Spanish; also, large Virginia Turkeys and Bremen Geese.
These fowls are all very fine, the spangled fowls beautiful.
H. H. LITTLE.
East Marshfield, Oct. 30, 1852. tf*1

Garden Seeds.

WE respectfully solicit the attention of purchasers of GARDEN SEEDS to our extensive stock, which we offer for sale. We have all the sorts of Vegetable Seeds that have proved worthy of cultivation; also, Grain, Grass and Flower Seeds. All the varieties are raised and selected expressly for our trade, and we do with confidence recommend them to all who desire to procure seeds that will prove true to their names.

☞ Catalogues gratis, on application.
RUGGLES, NOURSE, MASON & CO.,
Jan. 1. Over Quincy Market, Boston.

For Sale.

A few extra large and handsome Dominiques for sale cheap if applied for soon.
EDWARD ABORN,
No. 30 South Water Street,
Providence, R. I.
Dec. 27, 1852.

Bound Volumes.

BACK VOLUMES of the NEW ENGLAND FARMER, elegantly bound in Muslin, Gilt and Embossed, are now for sale at this office.
Boston, March 20

The Farmers' Library.

JUST RECEIVED, the following assortment of Agricultural and Horticultural Books, embracing the standard works of eminent American and European writers, on the Farm, the Orchard, the Garden, &c. &c.

	PRICE.
American Farm Book, by Allen,	$1,00
Farmer's Treasure, by Faulkner and Smith,	75
Dana's Muck Manual,	1,00
Prize Essay on Manures, by Dana,	25
American Muck Book, by Browne,	1,00
Lectures on Practical Agriculture, by Johnstone,	75
Elements of Scientific Agriculture, by Norton,	50
Principles of Agriculture, by Thaer,	2,50
Practical Agriculture, by Johnstone,	75
Agriculture for Schools, by Blake,	1,00
Catechism of Agriculture and Chemistry, by Johnstone and Norton,	25
American Agriculturist, by Allen,	1,00
Liebig's Complete Work on Chemistry,	1,00
Farmer's and Emigrant's Hand Book, by Marshall,	75
Home for all, by Fowler,	50
Book of the Farm, by Stephens and Skinner,	4,00
Cottage and Farm Houses, by Downing,	2,00
Downing's Country Houses,	4,00
Rural Architecture, by Allen,	1,25
Downing's Landscape Gardening and Rural Architecture,	3,50
Downing's Cottage Residences,	2,00
Fruit Garden, by Barry,	1,25
Complete Gardener and Farmer, by Fessenden,	1,25
Bridgeman's Gardener's Assistant,	2,00
Bridgeman's Kitchen Gardener's Instructor,	50
American Fruit Culturist, by Thomas,	1,00
Gardener and Complete Florist,	25
Florist's Guide, by Bridgeman,	50
New England Fruit Book, by Ives,	56
Youatt and Martin on Cattle, by Stevens,	1,25
Rose Culturist,	38
Johnson's Gardener's Dictionary, by Landreth,	1,50
Rural Economy, by Boussingault,	1,00
American Rose Culturist,	25
Bigelow's Plants of Boston,	1,25
Genera of Plants of the U. S., by Gray, 2 vols.	12,00
Gray's Botany,	2,00
Parnell's Chemistry,	1,00
New England Farmer, by Cole,	1,00
Ladies' Guide and Skilful Housewife, by Mrs. Abel,	25
Hive and Honey Bee, by Richardson,	25
Bee Keeper's Manual, by Miner,	50
Bird Fancier, by Browne, paper 25 cents,	50
Townley on Bees,	50
American Poultry Yard, by Browne,	1,00
American Poulterers' Companion, by Bement,	1,00
American Fowl Breeder, by Moore,	25
American Herd Book, by Allen,	3,00
American Shepherd, by Morrill,	1,00
Domestic Animals, by Allen,	75
Diseases of Animals, by Cole,	50
Hints to Sportsmen, by Lewis,	1,25
Dadd's Anatomy and Physiology o fthe Horse,	1.00
Mason's Farrier and Stud Book, by Skinner,	1,25
Management of Sheep, by Canfield,	1,00
Youatt on the Pig,	60
Knowlson's Complete Cow Doctor,	25
Horse Doctor,	25
Guenon's Treatise on Milch Cows,	38
Treatise on Hot Houses, by Leuchars,	1,00
Allen on the Grape,	1,00
Schenck's Text Book,	50
Breck's Book of Flowers,	75
Downing's Fruit and Fruit Trees.	1,50

For sale at the Publishers' prices by RUGGLES, NOURSE MASON & Co., Quincy Hall, (*over the Market,*) Boston.

April 3, 1852. tf

Ayrshire Stock.

Wanted, a thorough bred Ayrshire Bull, and Heifer, not exceeding two years old. Any person having such for sale, or very likely Calves, will please apply to the subscriber at this office.

☞ Also wanted, a fine native Bull, about one year old.

JOHN RAYNOLDS.

Jan. 1, 1853.

Corn Shellers.

IMPROVED YANKEE CORN SHELLERS, with and without separators. These machines are adapted to large and small varieties of corn, will shell rapidly and not liable to get out of order. For sale, wholesale and retail, over the market, by

RUGGLES, NOURSE, MASON & CO.

Nov. 27, 1852. 2m

Topsfield Nurseries.

PREMIUM TREES AND SCIONS.

The subscriber respectfully invites his friends and customers to his large collection of FRUIT TREES, embracing all the choicest varieties worth cultivation,—consisting of Apple, Pear, Peach, Plum, Cherry and Quince, from three to five years from the bud—thrifty and handsome.

Also, about 200 extra size Pear trees, 8 to 10 years from the bud, all in a bearing state, on pear bottoms.

Also, about 1500 Pear trees, on pear bottoms, from 3 to 4 years from the bud, very thrifty and of the choicest varieties.

Also, Mountain Ash, Weeping Willows, Arbor Vitæ, Fir Balsam, &c.

☞ Scions cut to order, from 1500 standard Apple and Pear trees, many of which are in a full bearing state, and fruited 130 varieties last year,—and delivered free of charge at any of the Depots in Salem or Boston.

W. G. LAKE.

Topsfield, Jan. 1, 1853. tf

Walnut Grove Nursery.

The subscribers would respectfully inform their friends and the public, that they have on hand an unusually large stock of Apple, Pear, Plum, Cherry, Peach, and other Trees.

Also, Quinces, Currants, Raspberries, Grapevines, &c., &c.

Ornamental Trees, and Shrubs, Buckthorn Plants, &c. &c.

Lot of Seedling Horse Chestnut, two years old.

Lot of European Sycamore, two years old.

Good plants of the new and improved high bush Blackberry, the fruit of which is of enormous size.

Fine Apple Trees, three to five years' growth from bud, seven to nine feet high, $25 per hundred.

We devote ourselves solely to the raising of trees; they receive our strict personal attention; we are therefore able to warrant every article true to name.

Those who intend purchasing large quantities of Apple Trees are respectfully invited to call before purchasing, and examine our stock, as it is large, and doubtless unsurpassed by any in the vicinity.

Trees delivered in Boston free of expense, packed if desired.

Catalogues sent to *post-paid* applicants. All orders thankfully received and promptly executed.

JAMES HYDE & SON.

Newton Centre, Mass., Oct. 23, 1852. 6w*2

Bolton Grey Fowls.

The subscriber offers for sale a few pairs of these favorite fowls, which may be had by applying, post-paid, to him at Dorchester, Mass.

GEORGE DORR.

Jan. 1, 1853. 4w

United States & Foreign Patent Agency.

Office, 39 State Street, corner of Congress Street.

THE undersigned, late Principal Examiner in the United States Patent Office, at Washington, D. C., offers his services to those about making application for Patents, with the hope that his long official connection with that Office, and his familiarity with its rules and practice, will enable him to give satisfaction to those who may employ him.

Those unacquainted with him are referred to the following testimonials from his late colleagues.

SAMUEL COOPER.

The undersigned, Principal and Assistant Examiners in the United States Patent Office, have for several years been well acquainted with Mr. Samuel Cooper, lately a Principal Examiner in this Office; and take pleasure in stating that he is a gentleman of the highest moral character, of unquestioned knowledge in the business and practice of the office, and that his scientific attainments are such as eminently fit him for the business in which he is about to engage.

HENRY B. RENWICK, } Principal
L. D. GALE, } Examiners.
J. H. LANE,
T. R. PEALE,
THOMAS T. EVERETT, } Assistant
F. SOUTHGATE SMITH, } Exam'rs.
WM. CHAUNCY LANGDON,

Boston, Oct. 9, 1852. 3m*

Buckthorn.

10,000 BUCKTHORN, for sale by

JAMES HYDE & SON.

Oct. 23, 1852. 4w**

THE FARMER'S

1853 | ALMANAC. | 1853

	Su.	Mo.	Tu.	W.	Th.	Fr.	Sa.	Su.	Mo.	Tu.	W.	Th.	Fr.	Sa.	
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HENRY F. FRENCH, } Editors.

☞ Terms, $1,00 per annum in advance.

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QUINCY HALL, SOUTH MARKET STREET, BOSTON.

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Interesting to Farmers.

THE subscriber has been induced at the request of several of his friends in the farming interest to enter into the manufacture of SHELL LIME, for farming purposes, and is now prepared to deliver at any of the railroads in Boston or Charlestown, the article in lots of from 10 to 100 barrels at the low price of 35 cts. per barrel, or if taken at the kiln at Medford Street, Charlestown, at 30 cents.

Also, for sale, 100 barrels of Thomaston Lime, in lots to suit purchasers.

Application may be made at No. 70 State Street, Boston, or at the Kiln, situated on Gould's Wharf, (so called) Charlestown.

JAMES GOULD, Agent.

DIRECTIONS FOR USING.

Place a layer of meadow mud of from 10 to 12 inches, then put on lime from 2 to 3 inches. Dissolve the salt in water, throw the liquid on to slack the lime, then another layer of mud, or peat, and so on alternately until the heap is from 4 to 6 feet in height. Proportion, 4 barrels of lime and one bushel of salt to the cord of mud; the salt mixed with the lime forms the muriate, and this mixture forms the valuable compound; this by decomposing the humid acid which is contained more or less in all meadow land, forms the muriate of lime—one of the most soluble substances, and if mixed with other volatile manures, prevents the escape and fixes the ammonia, which if mixed with lime alone would evaporate and render it valueless.

☞ The shell lime made into mortar, with three barrels of sand to each barrel of lime, will make a cement of better quality than the best of Thomaston lime, for cellar walls or stone work of any kind.

Nov. 6, 1852. 3m

Pure Suffolk Pigs.

The subscriber has now on hand pure blooded Suffolk Pigs for sale. Purchasers ordering them from a distance for breeders, may rely on getting the best patterns of the breed, carefully selected from different litters.

J. L. LOVERING.

Quechee, Vt., May 29, 1852. tf